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ADULT EDUCATION

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Adult Education

Reviews the literature for the six-year period since the issuance of
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FOREWORD

THIS ISSUE of the REVIEW, the third on "Adult Education," marks a time of much interest and activity in this field. The tempo is being stepped up in old programs, new programs are being considered, and the need for more adequate research is being recognized.

The Fund for Adult Education has published an impressive documentation of research entitled "An Overview of Adult Education Research," which was prepared by the Bureau of Applied Social Research, Columbia University.

The Center for the Study of Liberal Education for Adults has enlarged its scope and developed more co-operative relations with the National University Extension Association and with liberal arts colleges. The publications from the Center have become one of the best reference sources on new programs, philosophy, and research in adult education.

The National Agricultural Extension Center for Advanced Study, through its graduate and research program at the University of Wisconsin, has made great strides in establishing a firmer base for administration of the programs of the Cooperative Extension Service.

The six years since the last issue of the REVIEW to deal with adult education have seen the development of professional graduate programs in adult education at a number of universities and the establishment of the Commission of Professors of Adult Education by the Adult Education Association.

It is still necessary to define research in broad terms. Most of the research reported here does not meet the criteria of excellence. The related fields of sociology and psychology provide most of the best research identified in this issue. Yet it is to be observed that adult education research conducted by educators has begun its much-needed raising of standards.

Preparation of this issue entailed drawing upon many fields of knowledge, and more could have been taken from administration and vocational education. The Committee attempted to combine the most useful areas covered in the 1950 and the 1953 issues of the REVIEW.

BURTON W. KREITLOW, *Chairman*
Committee on Adult Education

CHAPTER I

Adult Education—An Overview

BURTON W. KREITLOW

TO ASSUME that adult education is covered sufficiently by issues of the REVIEW devoted to curriculum, educational psychology, administration, teacher personnel, and educational sociology is easy but erroneous. Though the organization of this issue requires chapter headings almost identical to titles of complete issues, until research in adult education is included as a significant part of these issues, it is necessary to examine the area separately. There may be some advantage, also, in treating it separately since it focuses attention on its growth in status and maturity.

Status and Maturity of Adult Education

Measures of the status and maturity of adult education can be derived from historical overviews, examination of philosophy and critical issues, study of program growth, and evaluation of the orientation of current programs.

Historical perspective on the adult education movement is provided by Grattan (8), who related past and present with insight. The California State Department of Education's bulletin (15) gave an objective description of the past's tie to the present. These accounts of past development include many of the aspects which are examined in "Philosophy and Issues" (Chapter II). The increasing maturity of adult education is shown by the greater attention being given to its value orientations.

Status surveys reflect the current situation and give evidence of maturing growth. The studies reflect growth both in program and in the methodology employed. For example, Essert (6) indicated that the number of people participating has been subject to much guesswork in the past. The first major effort to obtain quantitative data on participation in formal classes was described by Holden (10), who reported the collaborative efforts of the U. S. Office of Education and the Bureau of the Census in a sample survey of participation in group or class activity. Because of certain limitations of the study (particularly the omission of correspondence courses and mass media) the results inspired considerable controversy. This survey, however, provided a check point for future survey results. Clark and Sloan (5) established the first real base line on adult education in industry. Their report, based on survey research and descriptive summaries, was carefully qualified to take missing data into account. The inference can be drawn that adult education in industry is the most rapidly growing area of the field.

Graff and Edwards (7), reviewing the literature on public-school programs, found growth and expansion in almost every phase with conspic-

uous increase in liberal adult education. In a descriptive analysis Siegle (18) emphasized the important aspects of new programs in liberal education for executives and provided a summary of their common characteristics.

Many new programs have been identified, more often by descriptive than by research studies. Chapter IX summarizes the literature describing the programs and their organization and administration in the public schools, libraries, extension services, voluntary organizations, and university extension programs. Chapter X reviews the programs designed for education for later maturity. Chapter XI considers the relation of adult education to community development.

Trends in the Preparation of Adult Educators

As the field of adult education matures, it can be expected to pay more attention to the training of entrants seeking a place of leadership. Formal training programs will be developed and evaluated at an increasing rate. That this is already occurring is seen in the increased number of research reports in this area during the last six years. For instance, a comprehensive review of professional training programs was completed by Svenson (20), who identified the advanced-degree-granting institutions and analyzed their programs of study. His work, based on 1952-53 data, provides the base line against which future replications of his study can be checked. White (24) identified some common interests of adult education leaders in an effort to determine professional improvement interests. The study was very comprehensive, but the acceptance of a self-selecting sample as being random leaves some doubt as to the validity of White's findings.

The establishment of the Commission of Professors of Adult Education was a further indication of developing concern for training. Whipple (23) analyzed the logs of the first two meetings and identified some of the research needs in professional training. Houle and others (11) tried to establish the objectives and fundamental purposes of professional training programs, but their report showed little utilization of research in the establishment of this base. Kreitlow (13) provided a case study of the graduate program in Cooperative Extension and identified the objectives of the program related to research. No evaluation of the program was made. Carey (3) and Holden (9) reported on university adult education and public-school adult education respectively, identifying the broad characteristics of training programs and areas of training need.

Contributions from Other Fields

For a number of reasons, such as the increasing average age of the population, the growing pace of social science research, and the developing adult education movement itself, the accumulation of background studies of value to adult educators is increasing. A survey of the literature

of adult learning from 1930 by Calvin and others (2) reported increasing research, particularly with application to older adults. Similarly Lorge (14) summarized research findings on adult learning and pointed to the need for further studies of the psychology of the adult. Chapter IV is devoted to a summary of the literature in this area. Chapter V summarizes the literature on group learning, drawing particularly from the writings on group dynamics.

As the psychologists have contributed much to what we know about adults, so have the sociologists. Each year brought additional studies to the attention of adult educators. For instance, Wilkening (25) dealt with the adult farmer's perception of the sources of information. He found both form and content associated with the nature of the communicating agent as a social system with its set of functions, norms, and operational features. Rogers (16) continued the rural sociologists' concern with practice adoption, by summarizing the many important studies in this area and suggesting a way of classifying adopters of practices. Chapter III reports the literature of sociology, tracing the development of the sociological areas bearing on adult education.

All three of these chapters from "foundation fields" frequently lack studies directly relevant to adults and adult learning, and there are still large gaps in needed knowledge. Nevertheless there is much here that is yet to be worked into our programs and practices.

Research in Adult Education

A final indication of the trends toward increased maturity of the field is the extent to which adult educators themselves are studying their programs and carrying on the needed research. Verner (21) reported that research in adult education is increasing at an accelerating pace. Nevertheless, research on methods is relatively neglected. The reader is referred to Chapter VI.

The most comprehensive yearly listing of research completed has been made by Kaplan (12). Most of the studies were descriptive. Few approached the status of an experiment, and few combined evaluation and research.

There were also surveys of research in special fields. Brunner and others (1) identified the major weaknesses of research in nonvocational adult education and identified the important areas where research is needed. The definition of research was sufficiently rigid to exclude many documents. The Center for the Study of Liberal Education for Adults (4) reviewed and reported on various studies which clearly refute charges of "soft pedagogy" in evening colleges. Ward's documentation (22) of programs and research on programs for the aging demonstrated how an area of new concern builds up a great deal of descriptive program materials in a relatively short time.

Sabrosky (17) prepared a monograph which gave a clue to the increased emphasis the Federal Extension Service wishes to place on research in programs under its leadership.

The reader may judge for himself the extent and nature of the research by referring to Chapter IX, which reviews the research literature in the same fields as are covered in Chapter VII. Chapter VIII's survey of research in program planning and development summarizes research on the bases of program planning, the means by which programs are activated, carried on, and evaluated.

Adult education as a field is clearly maturing. The quantity and quality of research is on the upgrade. Spence (19) showed the need for co-operation between educators and other social scientists on research in adult education. As this issue of the REVIEW is read, it will become evident that such co-operation is a reality.

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CHAPTER II

Philosophy and Issues

HARRY L. MILLER

THE PERIOD under review confirms the remark of the British educator that American adult educators are forever pulling up the flower to examine the roots. The perennial issues in adult education stimulated controversy as in the past, with attempts to assess the issues more rigorously.

Systematic Approaches

The most significant effort to clarify major issues was a conference on the philosophy of adult education at North Andover, Massachusetts, in 1956, reported by Sillars (55). He observed two opposing camps, one stressing content, ideas, and the humanities, the other emphasizing method, action, and the social sciences. Though only one side accepted this dichotomy, it stands as a barrier to communication. Miller examined the goals for adult education asserted in papers submitted to the conference and noted general agreement on two beliefs: that man is a validating animal, seeking reasonable grounds for his statements of fact and value, for his choices and decisions, and for his actions; that man lives in an educative society, learning from the groups and associations to which he belongs and in which his freedom, if he is to have it, must be actualized.

Hallenbeck (23) reported on the Adult Education Association's statement of objectives and philosophy. Replies were reported in "Issues Confronting the AEA" (2). Speaking for the Association, Knowles (33) reviewed past attempts at direction finding and defined (34) the outstanding points of disagreement as to *what* should be taught and *how*, and the general aims of adult education in a democratic society. The range of views is emphasized by a symposium (3) in which nine adult educators separately stated definitions of adult education.

Sheats (54) noted the desirability of agreement on the collaborative nature of the teacher's role, the educative quality of all experience, the maintenance of an experimental attitude, and the sacredness of human personality. Benne (6) called for a direct philosophic approach to the problems of diversity and found the basic issues to differ little from those of education generally.

Significant Views of Purposes

A major stress is on individual intellectual orientation. Frank (19) saw the function of adult education as helping people learn to see them-

selves, think critically, and cope with problems intelligently. For the aging, he saw need to readjust the individual's view of a changing world. Blakely (9) stressed exercise of the thinking ability. Gruen (22), discussing the implications of Kilpatrick's philosophy, asserted that his theory of selfhood and the disassociation of education from mere "preparation" provides a distinctive intellectual and social role for adult education. Houle (28) focused the role of adult education on helping individuals learn what they know they need to learn.

A second major position defines the purpose of adult education as helping people increase the competence of their social role behavior. Its most systematic statement was in Havighurst and Orr's report (26) of the Kansas City study of the adequacy of social role fulfillment in a typical urban setting. Bradford (10), starting from the basic need of the individual to adjust to a dynamic society, concluded that adult education must influence the internal balance of the individual, his behavior in external situations, and his capacity to function in societal units. Caliver (12) similarly pointed to the need to identify the social forces creating change and to relate them to individuals' need to adjust. Carney's Catholic view (13) emphasized the relation of education to the individual's religious role.

The third, and what appears to be the modal, position relates the major purpose of adult education to the community and society. Blakely (8) insisted that the purpose of adult education is to provide education for the responsible use of freedom. Crabtree (17) stressed the role of the public schools in protecting and preserving democracy by stimulating interest and learning for societal problems. Producing a reverberating phrase, Keenleyside (32) saw education in a race with catastrophe. Mills (42) more modestly traced the shift in American political life from a community of publics to a mass society. Reller (47) saw the role of adult education as helping to clarify the meaning of democracy and as improving the quality of democratic processes. Schwertman (50) advocated that adult education become a social movement with the goal of making the ideal of the open society a reality.

Several writers laid primary stress on communication. Powell (46) pointed to the social need for communication which adult education must fill. Royall (48) defined adult education as "a type of communication within the open society whose proximate objective is the creation of *sub-communities* . . . for the continuous solution of essentially unpredictable problems."

Major Issues

An important issue was the opposition of ideas and action. Hallenbeck (24) saw the community as the framework in which the integration of diverse goals and activities of adult education can take place, and asserted that ideas and action are interdependent and inseparable—a view shared by many authors who advocated the social purpose of adult education.

Diffusion of the action position was seen in Styler's suggestion (57) that British adult educators shift to areas where need is for improvement of the environment and the conditions of social life, that they build programs around projects relating to actual problems. Gruen (21) criticized the community approach, asserting that it imposes arbitrary limits on subject matter. McGhee's more moderate position (38) maintained that the university ought not to restrict its function to the examination of ideas.

The issue of liberal versus vocational education, seldom articulated, was a consistent underlying theme. Many of the "social role" arguments imply advocacy of vocational education, and many of the arguments for liberal education were directed against this view. Miller (41) characterized most of adult education as a trade school for skills in social role behavior, and defined the common task of adult educators as the adding of liberating aspects to all educational experience they offer. Grant (20) called the pressure toward the satisfaction of immediate ends the curse of the adult education movement. He proposed that it seek to aid in the self-liberation of the human soul by systematic self-examination.

Other defenses of liberal education came from Kallen (31), who saw it as freeing man from the deadening routines imposed by the necessity of earning a living, and Waller (58) who defended traditional academic education by the need for leaders to have systematic knowledge and broad understanding. Houle (29) attempted to bridge the two positions by pointing out that liberal education is useful when applied to the solution of life problems and that it gives the individual an opportunity to develop his whole nature.

The issue of content vs. method was argued clearly. Broudy (11), describing the realist position, favored the acquisition of subject matter as the central goal to be acquired in the process of problem solving. Conversely, Schueler (49) argued that adult education uniquely and ideally shapes content by examination of where students are and what they feel they need. McGlothlin (40) asserted that adult education must believe people to be the best judges of their problems. Birnbaum (7), however, maintained the distinction between content and method to be artificial. He related the problem to the emotional component of learning and argued that the cognitive and the emotional are always interwoven.

Issues in Selected Agencies

Many of the issues described assert themselves in university divisions devoted to adult education. In this context they tend to be discussed in terms of appropriateness of certain activities to the central purpose of the university. Clark (14) pointed out that the extent of deviation from university tradition delimited the marginality of the enterprise and the attitudes of the rest of the university toward it.

Polarization comes from tension between those who advocate building programs around community needs and those who see the adult division

as a transmitter of the regular academic tradition. A clear statement of the first is by Adolfson (1), who argued that the job of university extension is to discover off-campus educational needs, to interpret them to the university, and to meet them. Diekhoff (18), taking the opposite view, asserted that the evening college is not an agency of social reform, a resource for the idle, a social center, or a group therapist, but an institution to provide formal education for those who failed to get it in their youth. To some extent this difference represents general disagreement between extension divisions and urban evening colleges.

Other views attempted to resolve the opposition. McGhee (39) argued that university adult education implies neither a dependence on community groups nor a mimicry of traditional curriculums and courses, but is a new dimension of education, an interpretation of new frontiers of knowledge for a large lay audience. Houle (27) and Schwertman (51, 52) both stressed the complexity of material and of intellectual approach as the criterion for deciding whether programs are worthy of university sponsorship. Schwertman suggested that a possible compromise lies in establishing the unity of life experience and knowledge.

Libraries

Exploration of program ideas and methods dominated the literature of library adult education. Debate continued on whether service to groups (including those sponsored by the library itself) is appropriate while book and information provision to individuals is still inadequate (16, 25). Houle (30) suggested a flexible attempt to improve both types of service while seeking from experience, community study (45), and analysis of adult needs (35) a varied adult education program uniquely suited to library sponsorship.

Unstable definition revealed further disagreement. Smith (56) included a diffuse scattering of activities beyond the organized, sequential, educational programs envisaged by a workshop group examining the training needed by library adult educators (4).

Labor Education

Most of the issues in labor education dealt with relations between unions and universities. The major source of concern about union-university relations was a Fund for Adult Education project, the Inter-University Labor Education Committee. Its early development, its growth pains, its areas of tension, and its accomplishments and failures were objectively described by Barbash (5). Other documentation of the IULEC story, with a full analysis of labor's educational needs and suggestions for ways of meeting them, was contained in an article by Mire (44), the secretary of IULEC and of its successor, the National Institute for Labor Education.

Underlying the conflicts in this experiment in university-union activity were a number of important issues. Some were discussed by Barbash (5) and by Liveright (36): whether today's labor unions have a philosophy, the marginality of labor education and labor educators, the conflict between the indoctrination approach and broad liberal education, and the question of how unions and universities should divide their task.

London (37) pleaded for including liberal as well as vocational education, and Sexton (53) strongly argued for the indoctrination approach. The question of who should teach what kind of educational program was dealt with by Mire (43) who concluded that unions should devote themselves to bread-and-butter, vocational education, and universities to broader subjects and contacts. Cook and Douty (15) concerned themselves with the kinds of programs appropriate for unions and universities.

Another major issue is the administration of labor education programs. Should local unions be permitted to work directly with universities without approval or veto rights by the International? What kinds of advisory committees should supervise university programs and in what ways can universities provide service to unions? These questions were raised primarily by Mire (44) and Barbash (5), who saw a need for greater co-operation between universities and unions. The question of governmental financing of labor education was touched by Barbash (5) and Liveright (36). Liveright (36), London (37), and Mire (44) agreed on the need for evaluation of labor programs.

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CHAPTER III

Adult Education and Society

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THIS CHAPTER reviews research in sociology, which in terms of scientific status has come of age since World War II. Some recent books (3, 34, 60) serve as guides to the field. Areas significant to adult educators are urban study (including human ecology), social organization, the family, the social psychology of city life, voluntary associations, and stratification.

The Character of Urban Life

A basic premise is that contemporary society is essentially urban and is becoming increasingly urbanized. This trend is taking place all over the world (16). Davis (14) pointed out that cities did not appear in human history until emergence of the family, the church, and government in the sixth millennium B.C. Growth of cities became possible when technological advances created a surplus of food and means of transportation that made trading feasible. Technology has brought the further growth and importance of large cities, and the essential features of urban life tend to be transferred to the country. So in the light of increased mobility and the trend toward total urbanization of our society, the traditional urban-rural dichotomy has been re-examined by Steward (51) and rejected in favor of a social network. As urbanization continues, it weakens culture and social organization, and people tend to organize their lives largely without benefit of stable institutions and norms.

Such organization has led to development of a mass society (35, 44, 45). Writers differed in their use of the term. Rose (45) referred to situations where people form audiences and in which communication is from a leader, opinion maker, or propagandist with little or no interaction between members of the mass. Hatt (20) referred to society in general as distinguished from that of the local community. Ortega (37) referred to the situation where power is held by the people instead of by an elite group.

Utilizing Rose's concept of the mass society (45), we find mass behavior irrelevant to differences of class, ethnic background, education, occupation, and income. The mass has no organization, no leaders, no body of personnel, and no structure; it is a number of anonymous individuals. Individuals in a mass society act together by a convergence of individual selections. When the selections of the mass converge, changes in mass taste occur, and the influence may be extended to other areas of life such as adult education, politics, education, business, and leisure patterns.

The pioneering study of urban life, begun by Robert E. Park and his students in the 1920's, resulted in the development of the "Chicago School"

and the stimulation of sociologists' interest in urban life. Wirth's classic essay (59) illustrates this general approach. Criticisms (50) of the Chicago School have noted its apparent overemphasis on the city's secularization and disorganization and its disregard of the city as a subsystem of a larger sociocultural system. (Thus, the city was studied as an independent rather than a dependent variable.) The resulting proliferation of studies may be divided into ecology, the social organization of the city, and the social psychology of city dwellers.

Human Ecology

Human ecology is concerned with the spatial distribution of population and institutions. This in turn affects the institutions and norms of an area and creates a culture which characterizes the area. Park (38) developed a frame of reference for the study of human ecology, but the first systematic treatment of ecology in sociology was by Hawley (23) and Quinn (42). Since 1950, interest in the study of ecological organization has grown. Kish (25) described the pattern of internal differentiation within the urban community, and found greater organization and differentiation near the center of metropolitan areas than in suburban areas, which tended to be homogeneous in terms of economic status, occupation, and attitude. Supporting Kish, Schmidt, MacCannell, and Van Arsdol (46), by analysis of the 1950 Census, found pronounced patterning of the population with respect to education, occupation, and income. Acquaintance with the ecological characteristics of his community may aid the adult educator to develop a program of activities of interest and value to "his" adults.

Social Organization of the City

Study of social organization in urban areas has continued, most research being in social stratification (39). As Wirth (59) indicated, study of social organization includes analysis not only of the structural aspects of social life as reflected in groups and institutions but also of the processes of social interaction and changing social relations. The city may be analyzed as a type of social system or a theoretical model of interrelated variables at one level of generalization (18). Various concepts—such as culture, social organization, socialization, stratification, associations, ecology, and collective behavior—have been used to analyze city life. Here we name only studies that analyze the institution of the family in an urban society.

Burgess (11) discussed the role of research in problems faced by the family in a modern society and found that the family has acquired a democratic companionship as a result of its need to adapt to an urban environment. The growth of interest in parent education reflects this need to adapt family life to the exigencies of urban life. Another study by Littman, Curry, and Pierce-Jones (32) on where families go for help in an urban environment revealed that most parents indicate a need for help,

fathers expressing less need than mothers, but left Catholic families under-represented. Benson, Brown, and Sheehy (7) studied family difficulties in a metropolitan suburb. They found lack of play space for children, sick relatives to be cared for, unemployment or inadequate income, and the like. It is significant that this study reported a low incidence of difficulties involving marital relationships. Family difficulties decrease with income, and families seek to solve their problems within the family. The need for adults to become aware of existing facilities that may help them to solve family problems was stressed by the authors.

Additional studies of social organization in city life are found in a volume edited by Hatt and Reiss (21). Specific problems in urban areas have been intensively studied, particularly those of aging (see Chapter X), race relations (52), leisure (28), education (13, 19, 22) crime (48), and politics (11, 27).

Social Psychology of City Life

Riesman, Glazer, and Denney (44) studied the impact of an urbanized society on the American character. Wirth (59), discussing interpersonal relationships among city dwellers, showed that people develop personality, acquire status, and carry on activities largely through voluntary associations. But city life is also characterized by secularization, secondary-group contacts, and poorly defined norms. Hatt and Reiss (21) presented 10 hypotheses to explain the character of interaction in cities, but few data are available to test them. Simmel (49) discussed the shifts of urban dwellers which make effective participation difficult and result in an outlook of expediency and sophistication to the detriment of emotional attachment.

Plant (41) discussed the impact of urban living on personality in a very suggestive study which described such characteristics of city life as poverty, street play, and crowding. Plant's continuation (40) and his writings generally are guides to further research. Comparison of the effects of urban living and rural living on personality have produced conflicting results.

Voluntary Associations

Many voluntary associations stimulate and initiate adult education activities. Is associational membership correlated with interest in educational activities? The hypothesis should be tested. Tendency to join is relevant to the adult educator's efforts to interest adults in educational activities, however they are sponsored.

In 1835 Tocqueville (53), remarking on the number of associations in our young country, believed they contributed to the stability of a democratic political system and helped train leadership. Williams (58) discussed the proliferation of formal associations as an observed condition of life. Lerner (29), in a section entitled "The Joiners," found voluntary asso-

ciation to be a product of the industrial urban society where diverse peoples come together with a diversity of attitude and interest. Two prerequisites for development of voluntary associations are democratic political process, which permits their independent existence, and an urbanized society, where no one institution dominates the total life of people.

Voluntary associations have been studied by Goldhamer (17), Komarovsky (26), Lundberg, Komarovsky, and McInerney (33), and Warner and Lunt (55); all reported many people unaffiliated. Lundberg and associates found many organizations, but three-fifths of his sampling reported no club membership. Among 5500 Chicago residents Goldhamer discovered that 30 percent of the men and 40 percent of the women were not members of any association. In her sample of New York City residents Komarovsky found most unaffiliated. Warner and Lunt disclosed that only 41 percent of the people of Yankee City were members of even one association. Nonjoining of rural people has also been documented in a number of studies, particularly by Anderson (1). An excellent review of research on participation in rural social organization was completed by Brunner (8).

More recent studies reveal a similar pattern. Axelrod (2) found many residents of Detroit unattracted to membership in formal associations; though most belonged to at least one association, almost one-third had no membership. Bell and Force (5) found persons of high economic status participating more actively in associations than individuals of low economic status. Freedman and Axelrod (15) reported that typical joiners constituted a very small minority, and that two-thirds of a metropolitan population belonged to one group only or to none. Only 8 percent of their sample reported membership in four or more organizations. Scott (47) found that almost 36 percent of his Bennington sample were not members of any voluntary association except church. All these studies tend to show that contrary to popular opinion most people are not joiners.

A serious weakness of most such studies is limited sampling. Use of the data of a nationwide sample, found by secondary analysis that associational membership is not a major characteristic of Americans, but that it is directly related to socioeconomic status (60). If associational membership correlates with educational level, as studies indicate, and education predisposes adults to further education (54), it follows that adults who tend to join voluntary associations are more likely to be interested in educational activities.

Generally participants in adult education are middle-class people. Income has been associated with formal participation (26). Middle-class people are the most active users of libraries, museums, and mass communication media. Lipset and Gordon (31), reanalyzing a study of labor mobility in Oakland, confirmed the findings of other studies of voluntary associations, i.e., membership in voluntary organizations is related to socioeconomic status. Semiskilled and unskilled workers who did not complete high school are less likely to participate than their better educated

fellows. Participation in associational life seems related to attitudes toward education in general. An NORC survey (36) conducted in 1947 found that lower-income groups emphasized college training less than higher-income groups as means to advancement. Brunner and others (9) stated categorically that participants in adult education activities tend to be active in voluntary associations, and that adult education programs are educating the better educated. Many individuals accorded high status in their communities are active participants in a number of voluntary associations, one of which is usually an adult education activity. There is little evidence, however, to suggest that those persons with the most prestige, the elite, or the upper classes are significantly active in adult education programs.

Social Stratification

Some system of social stratification is a functional requirement of most societies. As a fact of social life, it is of great importance in understanding the behavior of man in society. Many studies have been conducted on stratification in America, beginning with the ecological studies in Chicago, and through the early community studies, to the work of Warner, Meeker, and Eells (56), Barber (4), Bendix and Lipset (6, 30), and others. Greater precision has been achieved in the use of the concepts *class*, *power*, *occupation*, and *status*, and greater theoretical sophistication in the study of class has been arrived at. The depression of the 1930's stimulated interest in the study of social class. The open class nature of American society has encouraged interest in mobility within the social structure. Stratification research is characteristically concentrated on either the persistent or the changing features of society.

Bendix and Lipset (6) distinguish two traditions in the study of class: focus on prestige (or other subjective phenomena), revealing a "conservative" bias; reliance on objective indexes, like income or occupation, revealing a "radical" bias. Most recent research has focused on upward mobility of individuals within the society and how it functions to preserve equilibrium. Lipset and Bendix (30) reported that emergence into the American business elite from below has not lessened throughout the process of industrialization, thus contradicting the popular belief that opportunities have become restricted. But membership in the top elite has always been restrictive enough that it remains an unrealistic aim for those below. Since the middle class dominates our society in terms of values, aspirations, and styles of living, the adult educator should study the conditions which foster ambition for upward mobility into the middle class because adult education plays a significant role in upward mobility. The type of research needed is the functional analysis of adult education conducted by Radermacher and Smith (43) on an Austrian audience in 1932. They concluded that the manifest content of a course for white-collar workers was to increase general knowledge, but the latent function was to assimilate the intellectual amenities of the middle class.

No attempt has been made to interpret the major efforts at stratification analysis to adult educators. It seems obvious that certain skills and knowledge are required by the adult moving up the economic ladder; other knowledge, by the disadvantaged adult and the adult who would remain in an occupation that is rapidly changing. Apart from the interpretation required of major pieces of research, systematic study has yet to be conducted on the specific relations between social stratification and adult education. Brunner and others (9) devoted most of their summary of adult education research to the student, his learning, interests, participation, and motivation but include nothing bearing directly on his class characteristics. A forward step in analysis of the adult clientele of voluntary agencies would be a more careful description in terms of income. Brunner noted two exceptions to this pattern of noncomparable description: the nationwide study of its participants by the Great Books Foundation and the intensive study of 2000 participants in the Los Angeles discussion group programs (24). A stratification scheme is implied, however, in any research that deals with adult income, occupation, status, power, or educational attainment.

Participation in organized educational programs seems to be viewed by adults as a means of improving their social standing and of upgrading them occupationally and increasing their income. Some studies suggest new motives. White (57), examining uses of leisure time among several socioeconomic groups, found community activities foremost among lower groups. "Lecture-study" was rated highest by the top group.

Chinoy (12) saw the American worker as relinquishing the belief that he can advance socially and economically by individual effort. Possible disappearance of the utilitarian motive raises some questions as to the composition of audiences for future adult programs.

Further research should explore the clientele of adult education and its relationship to the changing class structure. More work could well be done on variations in learning speed, motivation, and interest according to social class. Degree of success at meeting the needs of various socioeconomic groups by adult education might be assessed. Finally, investigation could discover more accurately what education means to lower-income groups than has been done. Is it their belief that education stops with formal schooling? Are adult education activities looked upon as refuge for persons unable to acquire prestige in the community by participating in service activities?

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CHAPTER IV

The Psychology of Adults

HOWARD Y. McCLUSKY and GALE JENSEN

THE PSYCHOLOGY of adults has had increasing attention. Studies of maturity not only illuminate later life but also often involve findings from earlier years as a base of comparison. A substantial body of data is being produced as can be observed from the items appearing under the rubric "Maturity and Old Age" since it was first used in the September 1947 *Psychological Abstracts*. There are also the 15,983 entries of Shock's encyclopedic bibliography (52), Volumes 2 and 7 of the *Annual Review of Psychology* (41, 53), the (December) 1952, 1955, and 1958 issues of the *REVIEW OF EDUCATIONAL RESEARCH*, and the monumental volumes edited by Birren (8) and Tibbitts (55). To these may be added the symposium entitled *Psychological Aspects of Aging* (2), and the works of Pressey and Kuhlen (48) and Zubek and Solberg (63).

Theoretical Perspectives

Several authors attempted to formulate a theory of development of the adult years. Harris (22) provided much conceptual material applicable to the third decade and later life, including Anderson's discussion of openness, activation, growth, selection (choice points), learning, mechanization, cumulation, and emergence; Scott's distinction between differentiation by growth and differentiation by function (51); and Werner's elaboration of the orthogenetic principle of development (60).

Anderson (1) dealt more explicitly with a theoretical approach. Rejecting the "machine," "stress," "reverse development," and "one-factor" models as inadequate, he proposed one based primarily on the nature of the tasks (not internal characteristics) which confront adults. His discussion bears directly on adult education, especially with relation to the problems which the adult faces in organizing experience and extracting meaning from a world of stimulation essentially random for the individual. Other attempts at theory formulation were Birren's, from the viewpoint of neurology (7); Phillips' use of role theory (47); and Williams' adaptation of Parson and Shils' action theory (62). In a highly significant paper Murphy (42) sought to lay a theoretical foundation for studying the social derivation of maturations.

The Course of the Life Span

The most relevant approach to a differential psychology of adults is the study of life in its entirety. No definite picturing of the adult is possible

until details of the adjustments and reorientations required by successive life stages are known. Most of the studies reported here, however, are concerned with only a fragment of the life span.

Buhler (10) and Frenkel (19), classified biographical data of 300 persons of various ages and occupations into (a) external events, (b) inner experience, and (c) dates of work and accomplishments. They discovered that there is a regular sequence to life events and that psychological dimensions rise more slowly and culminate and decline later than biological dimensions. Their findings showed that (a) a tendency for specification of results arises about age 30, (b) a disposition to test the results of life arises about age 45, and (c) some time later a person begins to look back on the life that is past.

White (61) presented life-as-a-whole case studies of three persons from childhood to early maturity (aged 26, 29, and 33). Henry (27) initiated studies of the fantasies of three groups of normal adults (aged 30, 40, and 50), and organized the results around three variables: (a) conceptions of the external world, (b) inner reality, and (c) interactions of the self and the external world.

In a community survey of 500 persons over 60 years of age, Kutner and others (36) pointed out eight kinds of situations which demand continual reorientation during the later years. Havighurst and Albrecht (25) developed an instrument for the measurement of the social roles in older people. In the Kansas City Study of Adult Life, Havighurst (24) sought to measure social role performance in adulthood and paved the way for significant research. Pressey and Kuhlen (48) published the most comprehensive and systematic survey of the study of psychological adjustment through the life span that has thus far been attempted.

Some conceptualizing was found. In explaining the course of healthy personality development, Erikson (17) stated that an individual must begin life with achievement of a sense of trust, and by late adolescence he must have successively achieved the senses of autonomy, initiative, accomplishment, and identity. To these he must add a sense of intimacy, the parental sense, and a sense of integrity as he advances through early and middle maturity.

Apparently stimulated by Stockard, a biologist, and Erikson, a psychiatrist, Havighurst (23) carried further his theory of developmental tasks, defining nine tasks for early adulthood, seven for middle maturity, and six for late maturity. Within this conceptual framework, Kemper (33) assembled data showing the size and age of groups engaging in developmental tasks related to (a) family living, (b) production and consumption, (c) citizenship, and (d) leisure time.

Another framework was proposed by Peck (46), who postulated four stages of psychological development in middle age: (a) valuing wisdom vs. valuing physical powers, (b) socializing vs. sexualizing in human relationships, (c) cathectic flexibility vs. cathectic impoverishment, and (d) mental flexibility vs. mental rigidity. For old age he proposed three

more stages: (a) ego differentiation vs. work-role preoccupation, (b) body transcendence vs. body preoccupation, and (c) ego transcendence vs. ego preoccupation.

Changes in Time Perspective in the Adult Years

From the standpoint of the adult, life may be regarded as a five-decade (plus or minus) time schedule during which the major events and conditions can be expected to occur. His being behind, on, or ahead of schedule with respect to important life expectations may give clues to an adult's attitude toward himself and others. To what extent are life attitudes a function of the time already lived compared with the time yet to be lived? Investigation of how perception of time changes with age should provide another basis for construction of a genuinely differential psychology of the adult years.

Lewin (38) is one of the few psychologists who has written systematically about this problem. He found that in childhood the psychological future is vague and only slightly ahead. In adolescence it is still vague but infinite. Billings (6), a psychiatrist, stated that middle life is a period of transition in which bodily and social role changes require a reorientation of personality, the major focus of which appears to be a new perception of time as no longer unlimited, a greater awareness of past, present, and future, with the actions of the present more clearly defined as a means to a future end.

Kuhlen and Johnson (35) asked elementary- and high-school teachers between 20 and 64 years of age, "What would you most like to be doing ten years from now?" Hope to marry was the answer of most single women in their twenties, but by few after 30. After 30, single women and married men showed a primary interest in vocational advancement. In all groups, interest in retirement began in the forties. LeShan (37) reported that time perspective varies with social class.

Studies of Selected Variables of the Adult Personality

Kelly (32), in his presidential address before the American Psychological Association, reported a study of the consistency of selected personality variables. Retest returns were received after 16-18 years from 446 of the original 600 subjects. Results indicated that "significant changes in the human personality may continue to occur during the years of adulthood. Such changes . . . offer a basis of fact for those who dare to hope for continued psychological growth during the adult years." Strong (54) applied his *Vocational Interest Blank* to a number of subjects after a 22-year interval. As in Kelly's investigation, there was considerable stability of interest.

In studying the worry patterns of three diverse cultural groups, Dykman, Heimann, and Kerr (16) found that certain anxieties of the adult

years, such as those related to vocational outlook and marital problems, have a characteristic chronological placement. In a study of older trade union leaders, Van Zelst and Kerr (57) discovered that anxieties, such as fear of loss of health or work efficiency and fear of death, are frequent in declining years. Pressey and Kuhlen (48) presented data on the expansion and constriction of interests during the adult years as reflected in organizational, civic, and political participation.

Lorge (41) and Pressey and Kuhlen (48) found no positive correlation between conservatism and aging; this indicates that it would be a serious mistake to accept the conservative stereotype in dealing with adults in the middle and later years.

Nelson (43) reported proreligion trends with advancing years. Using the Thurstone scales, Ayad and Farnsworth (3) discovered a decided trend in favor of religion over a 20-year period. In one of the best studies of religious practices, Fichter (18) found that among Catholics in a Southern city, observance of certain practices is high during the teens, declines during early adulthood, increases in the forties and fifties, and reaches a high point in later years.

In their national survey of library usage, Campbell and Metzner (13) discovered that the proportion of individuals reading 10 or more books per year was greatest among those 21 to 29 years old, and that inclination to read fell off sharply with advancing age. Schramm and White (50) studied the relation of age, education, and economic factors to newspaper reading.

Schramm (49) devised one of the best available theoretical models for explaining why adults read. He found that four variables, (a) content, (b) index cues, (c) personality characteristics of the reader, and (d) active environment, are operable at any given "instant of decision" to read. His presentation deserves careful analysis by educators of adults.

Caldwell (12) observed use of the *Rorschach* test in personality study of the aged. Busse and others (11) studied normal and abnormal electroencephalograms of persons over 60 years of age and, for the Birren *Handbook* (8), prepared what is the best single and most up-to-date interpretation of research in the psychopathology of the aging person. Busse believes that constructive activity as a preventive of mental depression in the later years should be emphasized.

Learning

Hanes (21) secured data on the perceptual learning of three different age groups and found significant decrease with age in learning new associations but no real differences in the reorganization of previously acquired learning. Using six age groups from 15 to 72 years, Kay (30) discovered a progressive decrease in the proportion of each group that could carry out a set of printed directions. Errors and time required increased with the difficulty of the task. Korchin and Basowitz (34) repeated Ruch's experi-

ment on interference as a factor which differentiates learning at various age levels. Opposing Ruch, they found that interfering materials were not more obstructive for old than for younger subjects. In studying retroactive inhibition with verbal materials, Gladis and Braun (20) found some age differences in initial learning with small differences in transfer. These several studies indicate need for re-examination of the effect of past learning on present performance. A growing number of writers, however, believe that if there is a differential psychology of adult learning, it will be revealed by analysis of the *processes* of learning. In explaining learning as changes in cognitive structure (knowledge), motivation (like or dislike), group belongingness (growing into a culture), and learning in the voluntary control of body musculature, Lewin (38) has greatly influenced thinking in this direction. More recently, after a survey of 35 studies, Beal and Bohlen (5) hypothesized five stages through which adults pass in adopting (learning) new ideas and practices: (a) awareness, (b) interest, (c) evaluation, (d) trial, and (e) adoption. Welford (59), out of long experience with older adults, set forth six stages in the learning process: (a) comprehension of the material, (b) short-term storage, (c) retention, (d) re-use, (e) recall, and (f) use with adaptation in new situations. The theoretical framework of Lippitt, Watson, and Wesley (39) is also relevant. More attention to *process as such* should direct future research in the learning of adults. Tolman's theory of social learning (56), based mostly on data from animal experiments, conceptualizes the important problems of socially learned or derived needs, drives, and motivations.

Because of the relative scarcity of materials, adult educators should welcome the excellent review of theories and research about learning and aging which Kay (31) and Jerome (28) have prepared for the *Birren Handbook* (8). They are the most scholarly interpretations now available.

Mental Ability

There is general agreement that age *per se* is no barrier to learning and performance. You can teach an old dog new tricks. (A few people would go so far as to say that there are some tricks which only an old dog can learn.) Moreover, there is general agreement about the data on which this conclusion is based. But there is some difference of opinion concerning interpretation of the data. Wechsler (58), the leading exponent of the "decrease-in-ability" view, argues that the decline in test performance from a peak in the lustrum 25-29 is a reflection of a corresponding loss of ability; whereas Lorge (40), a leading spokesman for the "no-decrease" view, argues that the decline in performance reflects loss in speed of response but not in the ability (or power) to respond.

What light does recent research throw on these two interpretations? The 1955 standardization of the *Wechsler Adult Intelligence Scale (WAIS)* test showed a curve of mental growth and decline essentially the same as

that derived from the 1939 standardization of the *Wechsler-Bellevue* scale, with two important differences. First, the peak for the 1955 curve falls in the age interval 25-29, whereas the peak for the 1939 curve appears approximately five years earlier. Secondly the rate of decline in the 1955 data was noticeably less than in the 1939 data. To determine whether the speed requirements of the *WAIS* test penalizes the performance of older people, Doppelt and Wallace (15) administered five *WAIS* tests to a group of 465 men and women over 60 both with and without time limits. Results showed that the penalty imposed by the speed factor was negligible. To determine whether level of education influences change in performance with age, Pacaud (45) tested over 400 subjects employed in the French Railways. He was able to distinguish, at all ages, two groups, with education corresponding to the sixth and the ninth grades of the American public school. The results revealed almost identical rates of decline with age. This indicated, said Wechsler, that decline of ability with age is real.

Before the *WAIS* test was standardized in 1955, however, Corsini and Fassett (14) studied a "forced sample" of prisoners at San Quentin, California, and concluded that general intelligence maintains its level from early to late maturity. Jones (29) questioned establishment of Corsini and Fassett's hypothesis.

Some writers believe that speed deficiency in reaction of adults to test situations can be explored by a study of *set* and *expectancies* in test performance. Using age groups, 14-19, 20-49, and 50-55, Heglin (26) found with increased age an increased susceptibility to *set* and difficulty in surmounting it. Botwinick, Brinley, and Birren (9) developed four testable hypotheses with respect to the relation between reaction time and preparatory intervals.

There is general consensus that the best answer to the question of change in ability with age will come not from cross-sectional studies like those of Wechsler, Pacaud, and Corsini, but from longitudinal studies of the same persons over many years of life. Data of this type are meager. In a 1950 re-test of 127 Iowa State College freshmen tested first with the *Army Alpha* in 1919, Owens (44) reported a gain in the total scores of .55 S.D. What appears to be a contradiction of the Wechsler thesis can be accounted for thus: First, the greatest gains by Owens' subjects were in information and vocabulary, abilities which college graduates are likely to cultivate; secondly, the sampling may have inadvertently favored the positive outcomes; thirdly, much of the gain may have occurred between the freshman and senior college years, and not in the years of adulthood.

In a follow-up of the Stanford Study of the Gifted, Bayley and Oden (4) used the *Concept Mastery Test* devised originally for the gifted group. After 12 years there was a mean gain in each of four age groups amounting to about .5 S.D. for synonym-antonyms and somewhat less for analogies.

Additional review of this literature is to be found in Chapter X of this issue.

Needed Study

The traditional view of childhood and adolescence as a period for "growing up" and adulthood as a time for "settling down" provides an inadequate picture of the changes which people undergo as they move from the beginning of the third decade to the end of life. The picture can be improved by various means. Better knowledge of the adult years will depend in part on better measures of the dimensions unique to the adult experience. Efforts should be made to combine the inner and outer components of the personality in investigations of the adult years. Even more than the child, the adult is culture bound. This dimension is not revealed by the traditional measures of performance. The concept of ability, as applied to adult living, needs revision. To see ability as either declining or not declining is a misleading explanation of the facts. For the great majority of people, responsible and societally significant performance increases well into the middle years and for a substantial number expands into the later years of life.

Greatest gains in knowledge will come from extensive study of the individual over the life span. If the longitudinal and global studies of development from birth to age 20 have transformed our knowledge of infancy, childhood, and adolescence, it requires no prodigious leap of the imagination to predict that similar gains will come out of application of comparable procedures to investigation of the adult years.

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CHAPTER V

Learning in the Adult Group

JACK R. GIBB

PRIOR to the period under review there had been a distinct interest in groups as a medium for facilitating learning in adults. The last five years have seen increasing interest in determining conditions under which a group may become a more effective learning medium.* Most of the significant studies have been performed on young people. An occasional study has used men in military or industrial settings. Until replications of studies have been performed with adults, the adult educator is forced to rely upon studies primarily of school children. Certainly some caution in generalizing across populations is appropriate. For instance, although it is increasingly popular to emphasize the importance of the primary group in learning, communication, and morale (e.g., Ford (13)), Zentner (43) found that the relationship between primary group affiliation and institutional morale found in military settings was not found in educational settings.

Group Effects upon Members

It is evident that acceptance of group membership has an effect upon the attitudes and behavior of members. McKeachie (27) found significant relationships between attitude change and changes in perception of the group norm. Festinger, Riecken, and Schachter (9) reported that those who maintained face-to-face contact with groups tended to retain beliefs even after these beliefs were shown to be without foundation. Festinger, Torrey, and Willerman (10) found that a group's expectations about performance influenced a member's feelings of success or failure. Rasmussen and Zander (35) found that persons who were strongly attracted to the group and fell short of the group's standards had great feelings of failure. Those not as attracted to the group felt a lesser sense of failure. Samenfeld (37) found that group members who felt accepted behaved in ways significantly different from those of members who felt rejected.

Cohesion has been found to be related to productivity of the group in a variety of situations. Berkowitz (2), for instance, confirmed earlier findings that highly cohesive groups are more responsive to attempts to change their productivity than less cohesive groups.

* A comprehensive coverage of the literature on group process appeared in the October 1955 issue of the REVIEW and will again be reviewed in the October 1959 issue. See also Chapter VI in the December 1957 issue.

Group-Centered Teaching

It is eminently clear that not all group methods are effective for all teachers. For instance, Eglash (8), Guetzkow, Kelly, and McKeachie (16), Haigh and Schmidt (17), and Ruja (36) found no appreciable differences in results between discussion methods and other methods. Findings sometimes indicated that less group-centered methods were more effective. Final examination scores in the Guetzkow, Kelly, and McKeachie experiment (16), for instance, indicated statistically significant differences in knowledge gains in favor of recitation-drill methods over group discussion methods. This finding is in agreement with general findings that relative gains from group participation, if they occur, are more likely to occur in attitude and skill than in knowledge.

Research indicates that group methods can become effective under certain conditions. The conventional dichotomies that form the basis for studying methods do not frame the "real" alternatives for the instructor. Experiments comparing group discussion methods with lectures, democratic with authoritarian climates, and individual centering with teacher centering show inconsistent results. Examination of the studies indicates that the inconsistencies may be due to inadequate definition of the independent variable, lack of appropriate attitudes or training on the part of the instructor, or the presence of poorly controlled factors which turn out to be more potent than the variables under consideration.

Feedback

A number of studies can be interpreted as indicating that feedback is one of the crucial variables interacting with the methods used by the instructor. Janis and King (22) presented evidence to show that overt verbalization, even when artificially induced by a kind of role playing, tended to increase opinion change induced by group memberships. Accelerated verbal interaction allows an opportunity for exposure of member behavior and for possible feedback from member to member. Feedback is a multidirectional process within all parts of the group. Thus Solem (38) found that the attitude of the discussion leader communicated to the group had influenced various critical learning outcomes such as the quality of the solution that groups reached after discussion.

Della-Piana (6) found evidence that feedback is most effective when it is accompanied by an active search on the part of the learner. Learners with an induced "searching orientation" learned to define concepts more effectively than did learners with a "dependency orientation." Torrance (39) found that when the learning situation was structured to maximize feedback, this variable apparently outweighed whatever possible contribution a nonstructured methodology made over an authoritarian one.

There is some evidence that feedback of interpersonal feelings is helpful to learning. Thus Lott, Schopler, and Gibb (25) found that feeling-oriented

feedback produced greater task efficiency and less feeling of defensiveness than did task-oriented feedback. Maloney (28) emphasized the role of recognition and clarification of emotional statements in describing his successful techniques for inducing group learning.

There is some evidence that the instructor who participates most effectively in this reciprocal feedback process will be most effective in producing learning. Greer, Galanter, and Nordie (14) found that appointed leaders and members of most effective groups were best able to estimate the preference structures of small groups. Polansky's study (33) can be interpreted to indicate that teachers who are most aware of the status systems of the learning groups are best able to accept the group and to work co-operatively with its members.

Group Composition and Structure

Certain combinations of people work and learn together better than other combinations of people. Learners react differentially to teacher personality and classroom method. McCurdy and Eber (26) and Johnson and Smith (23) reported that some students have attitudes and expectations that are more appropriate to authoritarian climates and others to democratic climates. Durrell and Palos (7) and Haythorn and others (21) corroborated earlier findings that grouping on personality and preference bases has an influence upon learning and productivity of groups. Morrison (29) and Buswell (4) found that students' preference bases differed in democratic and authoritarian atmospheres. Adams (1) indicated that groups composed largely of members with equalitarian attitudes were more productive than groups composed largely of persons with authoritarian attitudes. Ward (40) found that group methods were best for the most capable students and that lecture methods were equally good for less capable learners.

Feelings of Interdependence

The effectiveness of groups in producing learning may be dependent in part upon the degree to which genuine feelings of interdependence are produced. Some learners with high autonomy needs may work best under conditions of independence. Learners with attitudes commensurate with interdependence may find co-operative learning situations most conducive to learning.

Grossack (15) and Phillips and D'Amico (32) found that co-operative groups were more cohesive than competitive groups, and had seemingly greater feelings of interdependence as indicated by decrease in directive influence attempts. Berkowitz and Levy (3) found that conditions in which members believed they could be rewarded for independent action lead to low cohesion and low group-task motivation. Some evidence that learners in states of interdependence are more easily influenced was presented by Hare (18).

Studies by Deignan (5) and by Rasmussen (34) demonstrated that differences between student-centered and instructor-centered methods of teaching are not great and that further analysis of the variables operating in such situations is necessary. Apparently the effectiveness of student-centered instruction depends upon such factors as the manner of structuring, psychological distance between teacher and group (11), the manner of handling stress induced by nondirective structuring (31), the composition of the group, and the skill of the teacher.

Yuker (42) corroborated earlier studies in indicating that under certain conditions co-operative methods produced greater learning. Further clarification of theory and methods is clearly necessary in this area.

Training

Several experimenters have cited the significance of teacher experience and training as a factor in the effectiveness of group-centered education. Some have suggested that group centering requires greater skill than does more traditional teaching.

Fleishman (12) and Harris and Fleishman (20) have presented convincing evidence of the ineffectiveness of some programs in training adults in human relations skills, and have performed a service in pointing out some directions in which our training programs must change. Ojemann and others (30) demonstrated clearly that it is possible to define a skill area precisely and to train teachers in using the skills. Teachers so trained were able to induce significantly greater changes in awareness and punitiveness than teachers not so trained.

Learners reared in our competitive and leader-centered culture probably require training to learn to profit from co-operative and individual-centered classrooms. Harnack (19) presented evidence showing that it is possible to give group members greater insight and to stimulate them to more productive goal-setting behavior.

One way to increase the skill of the teacher in the use of group methods is to provide him with techniques appropriate to the group-learning situation. For instance, one method reportedly well suited to group methods of instruction is role playing. Klein (24) provided a helpful summary of the literature on role playing, discussing advantages and disadvantages of its use. He found it particularly helpful when focused upon specific group problems, designed to increase sensitivity in human-relations training, or used as a stimulant to group discussion. Wilson (41) reported the successful use of role playing with 24 young adult leaders in public affairs.

Summary

Under certain conditions group activities seem to facilitate learning. Under other conditions such activities seem to hinder learning. Research has clarified some of the conditions which account for the difference. There

is some evidence that these conditions include provision for adequate feedback in supportive climates, optimal inter-action among group members, appropriate group composition for the method used, feelings of member interdependence, use of methods appropriate to group learning, and teacher and learner skill in the use of group methods. More research is needed to identify further the conditions under which learning in groups may become optimal.

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CHAPTER VI

Instructional Methods in Adult Education

COOLIE VERNER

STUDY of the methods and techniques of adult education has not yet brought into being any considerable body of systematic research. White (45) found that among nine topics of interest to adult educators, three were related to methodology. UNESCO (41) concluded that the apathy of adults toward further and continuous education is due less to indifference and aloofness than to failure of adult educators to recognize need for a system of pedagogical methods specially designed for adults. Miller (30) emphasized the need to improve the quality of adult teaching through specific training in processes for adult learning, and McLeish (27) attempted to design a frame of reference or conceptual scheme for the study of method. These studies may lead to systematization and the development of research and theory about methods suited to adults.

Previous Reviews

Recent reviews of research, such as that by Wilson and Gallup (46), have come from the Federal Extension Service. Crile summarized studies of the effectiveness of publications (18), of radio (16), of television (17), and of meetings (15). Brunner and others (9) reviewed studies of general methods, discussion, readability, and audio-visual aids. Gagne (21) analyzed research on training devices and developed a conceptual scheme.

Though studies specifically related to methods and techniques are few, a number of studies relate to problems of adult educators and contain information on methods by implication if not explicitly. Anderson (2) listed research studies in rural sociology, the studies listed by Coleman and others (12) were concerned with social factors influencing adoption, and Manny's research (28) related to rural community organization. Ross and Hendry (36) summarized and synthesized research about leadership, the leadership process, and leadership training.

Meetings

The most popular and familiar pattern of organization in adult education is the meeting or class. Crile (15) found that attendance at meetings conducted by the Federal Extension Service in 1954 was approximately 4 million more than in 1953. Coombs (14) found that those who attended educational meetings conducted by Extension agents in Maryland were

more likely to attend other meetings than those who did not. Marsh and Coleman (29) found that attendance is related to educational level and increases with increased education. Factors affecting attendance listed by Crile (15) include income, size of farm, and distance to the place of meeting. The better educated, more prosperous farmers from large farms, living closer to the meeting place, are best attendants.

Shoptaw (37) experimented with organized classes for adults in 20 rural centers over a two-year period. He found that rural families will attend educational meetings if they are planned to interest all members of the family and that continuance on a long-term basis encourages participation. He also found that distance influences attendance and that the use of churches, community buildings, and country stores has an advantage over consolidated schools by reducing the distance and encouraging neighborhood spirit. Crile (15) also found effectiveness of the meeting related to prompt starting, regular attendance, participant interest in the subject, willingness to take part in discussions, readiness to assume responsibility, and adequately trained leadership. Emphasis on meetings as a method appears to be justified by the findings of both Wilson and Gallup (46) and Rohrer (35); meetings rank second as a source of ideas leading to the adoption of new practices or new behavior.

Exhibits

Result demonstrations and exhibits are often used in adult education. Wilson and Gallup (46) found that approximately 6.4 percent of new-practice adoptions could be credited to result demonstration. Blackmore, Dimit, and Baum (6) found test-demonstration farms an important way of bringing to the attention of farmers the newer ideas of agricultural technology. Those closest to the demonstration adopted more new practices. The average number of adoptions increased from one to two miles, remained constant from two to five miles, and decreased beyond that distance. Gilbertson and Gallup (22) prepared a manual on the use of result demonstrations which, while not itself a review of research, was based on research findings.

Bigman (5), reporting selected findings from a series of studies of visitors to an art museum, found that visitors were predominantly older women and that the exhibits tended to appeal to professional people, white-collar workers, and students. The best liked exhibits were those with which the visitors could identify.

Bulletins

Printed material is the most used of all methods and techniques in adult education. Wilson and Gallup (46) found that bulletins influenced the adoption of 8.6 percent of the practices studied. Abell, Larson, and Dickerson (1) found that farm papers and bulletins were preferred by farmers in Schuyler County, New York, to other sources of information.

Carpenter (10) found a slight preference for bulletins over leaflets. Venne (43) found that direct mail announcements of extension publications yielded a response of 10-15 percent and that 45 percent of these respondents were new contacts. Crile's summary (18) indicated variable responses to such materials and showed that they cannot function alone.

Reading

The most detailed summary of literacy methods and techniques was that of Neijs (31), who explained nine methods of teaching reading; considered the organization of literacy campaigns, the preparation of materials and teaching aids, and evaluation; and included an excellent bibliography. Cass (11) provided information on the teaching of literates, particularly foreign-born residents in Americanization classes.

Reading improvement tended to be of more interest than literacy. Gray (23) summarized research relating to the reading ability of adults and found the average ability about equal to the average ability of pupils in the early part of the ninth grade. Witty (47) summarized research on reading improvement. He urged caution in the use of mechanical devices and found need for suitable materials, vocabulary building, development of specific skills, and speed reading practice. Smith and Smith (39) suggested that it is necessary to change attitude toward reading in order to improve reading ability. Wheeler and Anderson (44) tested 80 adults from 19 to 70 years of age who enrolled in a 20-hour experimental course. They found a significant increase in speed, vocabulary, and total reading score as a result of included discussion and the elements enumerated by Witty. Smith and Smith (38) developed some guides to the selection of materials. The U. S. Department of Agriculture (42) prepared a guide which offers a formula to enable individuals to increase their reading ability through self-study.

Evaluative Studies

Many studies compare one method or technique with another or assess the effectiveness of specific aspects of the educational process. Farnum (20) compared the aptitude of students in residence with the aptitude of students working for degrees through extension. He found no major differences that could be considered significant; however, such differences as did exist tended to favor the students working through the extension program.

The concept of adoption or acceptance of practices is a recent evaluative criterion for measuring the influence of diffusion processes. The adoption of a specific practice that has been taught provides evidence of changes in behavior and thus an evaluation of a learning activity. Wilson and Gallup (46) found that 24.8 percent of the adoptions reported were credited to individual contacts, 32.8 percent to group contacts, and 23.3 percent to

mass media. Indirect influences accounted for 19.0 percent. The number of adoptions increased at a fairly uniform rate as the kinds of exposures to information increased; thus the more contacts an individual has with potential sources of information the more likely he is to adopt new practices.

Palmer (32), comparing the effectiveness of lecture only, lecture and discussion, and discussion only, found the lecture technique to be slightly superior. Student satisfaction was highest, however, with lecture-discussion. Tucker (40) evaluated the usefulness of study guides distributed with some USAFI correspondence courses and found them particularly valuable to students with little education. Bradt (7) conducted a similar evaluation of outlines prepared for instructors of USAFI group study classes and found them especially useful to inexperienced teachers although most respondents wanted them to be more flexible.

Factors Influencing Method

Hughes (24) found that study and work habits are influential in determining the completion of correspondence courses. Having a regular time for study, an atmosphere free of distraction, occasional stops for relaxation, and finding practical applications of the principles presented in the course make a significant contribution to completion. Bradt (8) found that lack of time, changes of interest, problems with the mechanics of studying, and difficulty of the course were factors that influenced non-completion.

Kreitlow and Duncan (25) found that the degree of heterogeneity or homogeneity of a neighborhood influenced the acceptance of educational programs and the adoption of new practices. People of heterogeneous neighborhoods were found to be consistently more favorably inclined toward a majority of the school practices considered necessary for a complete school program, and they were more inclined to adopt more new farming practices, to attend more meetings, and generally to be more active in civic affairs. This difference between neighborhoods was also found by Marsh and Coleman (29) although not identified in such specific terms.

The influence of the social group was investigated. Zimmerman and Bauer (48) found that when an audience agrees with the new information or arguments presented, recall of that information is more nearly accurate than when the audience disagrees. Rogers and Beal (34) used projective techniques to test the relationship of the reference group concept to adoptions. They found that neighbors, family ties, and the change agent were the most influential referents for adoption. Coleman, Katz, and Menzel (13) studied a group of physicians and found that those who adopted a new practice did so first as a result of strong professional ties and then as a result of friendship patterns.

Age and educational levels exercise variable influences upon adoption. Marsh and Coleman (29) found that the relationship between age and adoption tends to be selective in terms of the specific practice, whereas Rogers and Beal (34) found a correlation between age and adoption of .06 which was not significant. In both studies, the more contacts there were with the change agent the more adoptions resulted, and those with more education tended to have more contacts with the agent.

Beal, Rogers, and Bohlen (3) tested a theoretical model listing five stages in the adoption process and concluded they are valid. The stages tested were (a) awareness—the individual is exposed to an idea, (b) information—he learns more about it, (c) application—he considers using the idea, (d) trial—he tests it, and (e) adoption—he evaluates the trial and decides for continued use. These stages have implications for adult educators in the design of educational activities and in methods.

Conclusion

In spite of their importance to adult education, methods and techniques received scant attention from research workers. A number of publications related to methods that come out of experience rather than scientific study. For example, Lewis (26) prepared a guide for the planning and conduct of a single meeting, Beckhard (4) offered one on workshops and conferences, Douty (19) made application in terms of a specific group, and Reeder (33) presented a general guide applicable to any community group. Though publications such as these are useful, they contribute little to the advancement of scientific knowledge about the educational processes they describe.

It is generally assumed that there are no significant differences in the use and effectiveness of methods between adult and pre-adult levels. This assumption itself has not been tested, and it discounts any important psychosocial differences that may develop. The acceptance and adoption studies have emphasized the important influence exerted by psychosocial factors and tend to support this reservation.

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CHAPTER VII

The Organization and Administration of Adult Education

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THE LITERATURE is reviewed for public schools, libraries, co-operative extension service, voluntary organizations, and university extension programs.

Public Schools

The last five years have seen a significant increase in the number of studies which examine in depth specific aspects of public-school adult education.

Financial patterns were examined by Olds (51) under the auspices of the National Commission on Adult Education Finance. Olds found that in 17,000 districts \$79 million was spent annually on adult education. However, this amounted to only 1.3 percent of total public-school expenditures in those districts. It was concluded that every state ought to provide specific financial aid to adult education as a part of its foundation program of assistance to public schools and essentially on the same basis as provision for elementary and secondary education. In support of this policy it was noted that in the 10 states with considerable aid three times as large a proportion of adults were enrolled as in 38 states with little or no aid. Fivefold increase of state aid in New York between 1944 and 1952 was accompanied by an increase in adult enrollment 15 times that prior to 1944. Olds found that the average cost of adult education is 46 cents an attendance hour, about 50 percent higher than the cost of elementary education. The study, however, included many small communities and programs with small classes. The unit cost drops substantially where a high enrollment and attendance is maintained in each class.

The role of professional leadership was examined in several contexts. In a study of the adult education services of state departments of education Holden (33) examined patterns of professional leadership. His findings confirmed that both professional leadership and state aid are necessary for program growth. Hurlbut (35) reported that California districts employing a full-time administrator had twice the participation of the state average.

Of 21 trends in public-school adult education identified by Graff and Edwards (29), the trend toward the appointment of local directors of adult education was the second most pronounced.

In terms of historical perspective there has been a decline in state leadership. Holden pointed out (33) that 30 years ago 15 states had full-

time directors for general adult education. In 1946-47 the number of full-time directors was 13 and remained the same to and during 1956-57.

In the last three years the National Association of Public School Adult Educators (in co-operation with the Fund for Adult Education) has provided money to employ state directors in Colorado, Minnesota, and Oklahoma. With such aid Georgia, Iowa, and Utah have each added a full-time person since January 1958, and this may mark the upward swing of the trend (55).

The state department study by Holden (33) summarized the provisions the states have made for adult education. Forty-one states now have legislation enabling the public schools to finance and operate general adult education programs. Radcliffe and Holden (57) showed in chart form that all but one of 48 states had provided for education of adults at some level.

A number of studies examined the program of specific states or communities. In California, Mann and Getsinger (43) reviewed the 100-year history of the state program; and Hurlbut (35), the financial structure. The Mann and Getsinger study is of general interest because of the inferences it provides as to some of the methods followed in obtaining state financial aid. The Hurlbut study recognized the premium the California state aid formula places on enrollment and suggested that reimbursement to local districts on the basis of average daily attendance alone be modified.

In Colorado (28) and Minnesota (44), involvement of state officials in surveys of adult education offerings led to the establishment of state-supported adult education programs.

Under stimulus of legislative curtailment of the Michigan program, Cheskie (21) compiled the opinions and public statements of leaders in Michigan and elsewhere as to the goals and values of adult education. Thomas (70) studied the 100-year-old program of Buffalo and discovered that a steady growth pattern of earlier years was interrupted by the depression and World War II and never fully regained. Jackson, however, found that in Los Angeles (36) a slow and steady expansion followed the depression and that new and expanded programs were developed after World War II.

In New York City, Silverman (64) sought to discover the essential ingredients of a procedural manual by investigating the inservice training needs and interests of the principals and supervisors in the areas of program organization, supervision of the instructional staff, and general administration.

Growing force of the public schools in adult education was reflected in the more extensive and more comprehensive research than that of the other two periods covered by previous issues of the REVIEW.

Libraries

Extent and variety of adult education activities in libraries showed marked increase and development. Evidence that such increase is due

largely to stimulation and support from the Fund for Adult Education is supplied by Stone's survey (69) of the development of library adult education from the time of the earliest Carnegie grants, and by Smith (66). The latter gave detailed information on the kinds of services and activities being provided for groups; useful evidence regarding obstacles standing in the way of further development; and facts on the financing, personnel, and structure of adult education departments in public libraries. The study was based on a 41-percent return of a detailed questionnaire sent to public libraries in towns over 2500 in population, and on interviews and observations in both random and nonrandom samples. The survey revealed nothing as to quality and effectiveness of the programs.

There was much discussion and evaluation of the role of the library and the character of the services needed to carry out its responsibilities in adult education. Hamlin (30) and Stevenson (67) made a summary of characteristic approaches and expressed some of the guiding philosophy; a range of viewpoints was gathered in the American Library Association's official journal (1). Powell included libraries in his study of adult learning in the United States (56). A major contribution to evaluation of public library service (4) emphasized standards and principles of educational services to adults which are based on knowledge of and relationship to the community.

A major survey of libraries in the Pacific Northwest, to be published in 1959 (42), included a survey of adult education activities based on the Smith survey (66). Javelin (37) surveyed state library extension agencies to determine the extent to which additional federal funds had stimulated services to adults. Other studies of present programs concerned rural libraries (74), library services designed to meet the needs of an aging population (54), and small and medium-size public libraries (53). Methodology developed for the last group, particularly that for evaluation of the library's adult educational program in the light of characteristics of the community and techniques of library-use study, proved generally applicable in the Library-Community Project. Phinney conducted a study of film use in libraries which resulted in the adoption of the uniform practices in reporting statistics necessary to any study of the educational use of films with adults in libraries (2).

Training needs revealed by the Smith survey (66) were explored (8), and some progress in implementing the resulting recommendations was reported (9). The Subgrant Project, in which 20 institutions were assisted in initiating new programs with community groups, received comprehensive treatment (6). The Library-Community Project's material contribution to a closer integration of the library with its community is reported in the *ALA Bulletin* (3) and in its occasional publication, the *Library-Community Project News* (5). The effects of the total grant program were briefly summarized by Phinney (52), and more fully described and evaluated by Hewitt (32). The full account awaits the termination of these grants in 1960-61.

The Cooperative Extension Service

Significant knowledge for scientific analysis and for further development of one of the major adult education programs of our time is provided by research pertaining to the organization and administration of the Cooperative Extension Service. The following review identifies the kinds of research that have been conducted on formal and informal organization of the Cooperative Extension Service and suggests areas where additional research is needed.

The purpose of the Cooperative Extension Service, and the clientele to be served, was further defined in 1953 by Public Law 83 (*U. S. Statutes*. Vol. 67, p. 83. 83rd Congress 1st Session, 1953.), which amended the Smith-Lever Act of May 8, 1914 (*U. S. Statutes*. Vol. 38, p. 372, 63rd Congress, 2nd Session, 1915.), establishing the Service, and subsequent federal legislation. A revised Memorandum of Understanding between the U. S. Department of Agriculture and the Association of Land-Grant Colleges and Universities (72) sets forth what each party agrees to do and how it is to be done.

The Cooperative Extension Service emphasizes working *with* people rather than *for* them in solving problems which the people themselves recognize as important. Brunner, Sanders, and Ensminger (17) pointed out that this philosophy is not followed in other countries. Bliss (13) traced the spirit and philosophy of Extension work. Detailed recommendations in respect to objectives, scope, internal and external relationships, teaching methods and procedures, training of professional workers, and financing of the Cooperative Extension Service were formulated in 1948 and summarized in a Joint Committee Report (72) to the Secretary of Agriculture. This report has been influential in guiding state reorganization.

Case studies of the organization, administration, and personnel policies of the Cooperative Extension Service in selected states were conducted by Axinn (10), Browne (16), Creech (22), Dunlap (25), and Smith (65), as Fellows in the National Agricultural Extension Center for Advanced Study, University of Wisconsin. Nichols (49) and North Carolina State College (50) conducted similar studies which served as bases for administrative analysis and reorganization. This research revealed that each state is unique in its organizational structure and administrative policies, and that basic changes are desirable. Generally recognized principles of administration were applied in various degrees to describe and analyze the effectiveness of the organization of a voluntary adult education program such as the Cooperative Extension Service.

The role of the county extension worker and the county agricultural executive committeeman, in a period of rapidly changing social, economic, and political conditions affecting agriculture and homemaking, was studied by Wilkening (75) and Fenley (27). Wilkening found that providing information on specific farm and home practices, teaching, and consulting

in the underlying principles of farming and homemaking ranked high among the major functions of county agricultural, home demonstration, and 4-H club agents. Boone (15) and Ringler (58) observed that the departmental organization of subject-matter specialists influenced their professional status, functions, and ways by which they assisted county agents and farm families. VandeBerg (73) revealed that county agents' concepts of the functions and responsibilities of district leaders varied from those held by specialists and the administration.

Questions which additional research in Cooperative Extension Administration (46) might answer are: What are the present program policies and how are they determined? Whom should Extension serve, to what degree, and in what problem areas? Research might also regard problems of internal administration in respect to morale, staffing, training, organizational structure, budgeting, and reporting; and external administrative relationships, including the role of advisory committees, local sponsorship, and clientele to be served.

Voluntary Organizations

Scores of brochures and statements about individual programs and voluntary organizations do little but describe. Some material deals with the voluntary process as revealed by studies of conformity, communications, and power structure in the community. Katz and Lazarsfeld (39) described the effect of face-to-face groups in blocking or modifying the force of messages transmitted by mass media. A similar phenomenon, the influence of closely knit religious and other voluntary groups in limiting or retarding changes in agricultural practice, was reported by Duncan and Kreitlow (24).

Studies of voluntary organizations are more common, but the best, such as Burkett's estimate of 25 years of work of a parent-teacher organization (18), are available only on microfilm.

Tsouderos (71) identified critical factors essential in successful voluntary organization: freedom of association, degree of formalization of the structure, extent of the professionalization of the staff, and heterogeneity versus homogeneity of membership.

Factors influencing membership and participation have been observed with increasing thoroughness. The number of studies of the participants in adult education reported by Kaplan (38) in 1958 appears to be many times as great as 10 years earlier. Increase in the number of historical studies brought with it concern about the "evolution" of voluntary organization. Harrison (31) reviewed a century of effort of a workingman's college, noting the organizational characteristics and how they change, the social pressures, and the shift in members' values which explains not only the effectiveness, but also the persistence of this institution. Like-

wise Bode (14) in his account of the American lyceum made useful comparisons with present-day organizations, describing the "favouring elements" in nineteenth-century American society and the reasons why the lyceum went into decline.

Voluntary organizations have subjected themselves to increasingly rigorous self-appraisal. YMCA *Yearbooks* (47) since 1955 reported scores of self-studies every year, and the same trend is also found in many social agencies. Serotkin (61) developed several criteria for appraising recreation and informal education agencies, including an estimate of the degree of member participation.

The Adult Education Association, following several efforts at self-appraisal, engaged a research organization to conduct a formal inquiry (41) into its purpose, organization, and structure. The AEA also established a form for reporting both views and research on voluntary organization in the "workshop" section of its magazine, *Adult Leadership* (12). Birnbaum and Colburn (12), summarizing several trends in voluntary organization, reported a shift toward greater local autonomy or toward "joint" decisions about policies by national and local organizations.

For most voluntary organizations, fund raising is a critical activity. Seeley and others (60) inquired into the operation of one fund-raising organization, and in doing so reviewed many questions about philanthropy as applied to welfare and education.

In a study of the National Foundation for Infantile Paralysis Sills (63) analyzed the factors essential for successful operation of a voluntary organization. His findings indicate that the ultimate character of an organization is determined by its membership, its formal structure, its activities, and the environment within which its activities are carried out.

University Extension

Morton directed the most comprehensive study to date (45) of university extension in the United States. He examined the backgrounds, development, organization, administration, financing, and programing of 76 university extension divisions, and provided basic data never before available. Among unresolved problems found were administrative confusion between the extension organization and other operating divisions, inadequate development of standards and procedures adaptable to adults, and absence of effective two-way communication between universities and the adults they serve.

Stockton (68) studied the beginnings of adult education in Kansas. Arnold traced the historical development of University Extension at the University of Tennessee and emphasized the obligation of the University to provide reserves for "educational experiences which lead to behavioral changes in keeping with the ideals of democracy." Rosentreter (59) wrote a history of the University of Wisconsin Extension Division from 1885 to

1945. The chapters on the early history of extension at Wisconsin are useful, but much of the study is overburdened with minutiae.

Burrell (19) traced the offerings of Columbia University from public lectures in 1830 through the establishment of Extension Teaching in 1904, the Institute of Arts and Sciences in 1913, and the School of General Studies in 1947. A special faculty committee of Columbia University (39) studied and evaluated the School of General Studies. It defined the proper function of the School as providing a college education for adults, a full-fledged undergraduate education in the liberal arts. It found that in 1955-56 nonmatriculated students accounted for four-fifths of all registrations and concluded that the presence of unscreened nonmatriculated students was incompatible with the objectives of the School.

Kidd (40) gave the historical background and growth of university extension and adult education programs sponsored by Canadian universities, and discussed their philosophical framework as well as their organization and administration. He concluded that the university cannot and should not be responsible for all kinds of adult education and that it must be highly selective in what it chooses to do. Crimi (23) studied the extent and nature of adult education efforts of independent liberal arts colleges in the United States and attempted to determine why they have added this function. He concluded that if unmet "college-level" educational needs among adults in the community exist, it is both expedient and appropriate for each college to examine its opportunities and possible obligations in the field of adult education.

In the first study of the evening college as an institution Dyer (26) examined programs, the composition of students and faculty, and problems of administration. Finding that the evening college curriculum tends to parallel that of the day college, he recommended experimentation in curriculum development according to the experience and needs of adult students. The role of the evening college, he contended, should be related to the social changes which follow economic changes.

Neufer (48) surveyed the administrative policies and practices of 84 evening divisions. Carey (20) sought to determine why students drop out of evening colleges. The unavailability of courses was mentioned most frequently (27 percent).

Siegle and Whipple (62) described new university programs in the liberal arts which indicate new tendencies and directions in university adult education. Houle and Nelson (34) focused attention on the specific role of the university in educating adults in world affairs. Barbash (11) described and evaluated worker education programs sponsored by the Inter-University Labor Education Committee through the extension divisions of eight universities. He found that programs in world affairs and economic understanding gave new dimensions to the university offerings but lacked systematic efforts to make these the basis for a deeper educational experience.

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CHAPTER VIII

Program Planning and Development

JOSEPH L. MATTHEWS

PROGRAM development in adult education is a continuous collecting of information for problem identification, determining program objectives, decision making, and implementation of the decisions. Much of the little research in programing is peripheral.

Facts as a Basis for Program Planning

Several studies focused on the kinds of information to collect for use in planning adult education programs. Howe and Alexander (15) tried a co-operative procedure that included deciding what information to collect, preparing a survey questionnaire, selecting sample areas, tabulating and processing data, and using the survey information in program planning. They concluded that this process provided realistic and useful information. Hand (13) developed a list of information needed for gearing adult education programs to the basic problems, interest, and needs of the community.

Jayne and Gibb (16) reported results of the Mountain-Plains Adult Education Project. This study demonstrated that fact-finding conferences are effective in stimulating a critical examination of local community needs and often lead to co-operative plans. Clark and others (6) condensed findings from a report on working with people 18 to 30 years of age, out of school, and living at home in three New England towns. During a three-year period, groups were observed as they moved through four stages: (a) contacting and assembling for first meeting, (b) planning and working toward agreement, (c) agreeing and doing, and (d) evaluating and deciding next steps. The professional person, most important during the first stage, served as leader in the second. The young people were more involved in the third. In the fourth, leadership shared importance with objectives and organizational structure.

At Philadelphia health fairs in 1953 and 1955, Dixon and others (8) interviewed visitors to determine the extent to which the fair was achieving its objectives. Forty-eight percent of the visitors took at least one of the many health tests offered, no visitor taking more than four tests.

Sorenson (27) interviewed farm operators and managers to determine the factors affecting levels of technical soils knowledge. Formal education, contact with the county agent, reading farm magazines, and participating in farm organizations led to greater knowledge. Other factors, such as age, farming experience, size and type of farm, geographical location, and radio programs had no apparent influence.

Surveying a national sample of over 15,000 home demonstration club members, Feasenden (9) determined their personal and family characteristics. Homemakers under 30 years of age were not high social participators, but those 30 to 50 years of age composed about half the membership and made the greatest contribution to leadership. Twenty-two percent of the members were 50 to 59 years of age; many were leaders. About one-fifth were over 60 years of age.

Boyle (4) tested program-planning principles from the literature with a jury of extension workers and agriculture teachers in Wisconsin. A high rating was given to consideration of the educational needs of the potential program participants. Sarbaugh (25) reported testing of a method to determine the needs of the public for U. S. Department of Agriculture publications. County agents and their secretaries in 28 counties in five states recorded and classified 22,000 questions.

Motivation in Programing

Some forces tend to move the adult toward participation, and others tend to block participation. Beal (3) interviewed members of farmer co-operative associations and found a relationship between member participation and these dynamic factors: (a) understanding of co-operative principles, (b) knowledge of facts about the co-operative, (c) satisfaction with it, (d) having a voice in running it, (e) feeling responsibility to it, (f) identifying with it, (g) definition of its role, (h) number of neighbors belonging, (i) what they see as greatest benefit from co-operatives, and (j) knowledge of existence of wholesale or regional co-operatives.

Dixon and others (8) concluded that the location greatly determined who attended health fairs in Philadelphia. Hand (13) stated that participation in and support of programs is proportionate to the degree to which they are geared to the problems, interests, and needs of the communities.

Rogers and Beal (24) in an exploratory study used taped interviews and stimulus pictures with 23 farm operators to determine the reference group influences in the adoption of agricultural technology. They defined and used five adopter categories based on the time of adoption. Early adopters tended to have more contact with the county agent, greater knowledge of the extension service, better acquaintance with extension workers, and more favorable attitudes toward the extension service. Favorable attitudes toward scientists were positively associated with higher adoption figures. Sorenson (27) concluded that formal education had the greatest relationship to soils knowledge.

Program Planning Committees

The few studies dealing with use of planning groups agree that maximum involvement in program planning is to be sought. Boyle (4) devel-

oped 11 principles of program planning. One is that the planning group should include local citizens who are potential participants in the program. Musgrave (21) described the structure and organization of a county agricultural extension council in Michigan.

Wilker (31), studying public-school adult education programs in western New York, found that two-thirds of the program directors had advisory committees. Welch and Gordy (30) analyzed annual reports of county extension agents to determine status and changes in county advisory committees. During the period 1953-56, the number increased 26 percent to the equivalent of 10 committees, 225 members, and 35 meetings per county. From interviews with 119 committee members and 21 county agents in Kentucky, Nebraska, Pennsylvania, and Wisconsin, Gwinn (11) ranked nine functions of advisory committees in this order: (a) identifying problems, (b) developing a program, (c) evaluating the program, (d) developing planning policies, (e) sounding out ideas, (f) publicizing, (g) developing an annual plan of work, (h) determining program emphasis, and (i) executing the program.

Studying the understanding of their functions by 123 committee members in the Minnesota co-operative extension service, Forbes (10) found that they seemed willing to assume responsibilities but lacked understanding of them. Richert (23) reviewed studies to determine whether high productivity could be expected from program-planning committees combining both lay and professional representatives of organized and unorganized groups and officers of both organized extension and nonextension groups. She concluded that mere representation was not enough; individuals of high social status might serve better as resource persons than committee members; agency professional persons should not be included; social status should not vary within the committee; members should be given immediate orientation; a single meeting cannot be very productive; extension agents are better qualified to select representatives than the membership of organizations; the committee chairman should be skilled in maintaining effective working relationships.

In Iowa, Swenson (28) surveyed 157 agricultural extension council members to determine their understanding of their duties and responsibilities. A positive relationship was found between understanding of duties and responsibilities and (a) prior active participation, (b) formal education, (c) participation in community activities, and (d) participation in Extension council and program activities. Morrow (20) experimented with an approach to long-range integrated programing in a Minnesota county extension service and identified basic principles that need further testing.

Howe and Alexander (15) reported on the use of survey information presented to a county program-planning committee by professional Extension staff members. Musgrave (21) classified county program planning into four types: with groups, with individuals, with consultants, and with

local staff members. The four had initiation, sponsorship, and execution in common but varied in steps involved, roles played, and problems encountered.

In case histories of 12 county agricultural extension programs, Darter (7) evaluated effectiveness of Extension agents. He concluded that the most effective county agents (a) emphasized developing the capabilities of participants; (b) provided an educational experience for them; (c) involved a large number; (d) developed the program with local people; (e) had local support in carrying it out; (f) utilized the planning process to co-ordinate efforts of the Extension Service, other agencies, and organized groups; (g) made great use of organized groups; and (h) integrated the agricultural, home economics, and youth phases of the Extension program.

Problems Included in the Program

Fessenden (9) pointed up home economics program needs in family financial management, clothing, child guidance, time management, and family eating habits. Harrison (14) found teachers of noncredit courses and teachers of credit courses in university evening colleges to respond differently because of time limitations, variations in backgrounds of students, and evaluation of courses by the students themselves. Experimenting with a counselor to help registrants in family life education, Hale (12) concluded that counseling improved programs by revealing concerns that did not emerge in other approaches.

Loomis and Leonard (18) in a rural survey found that most adult education organizations had programs in at least one of three fields: international understanding for peace, strengthening democracy, and understanding and strengthening the economy. Nielson and Crosswhite (22) reported that in an on-the-farm approach in agricultural Extension, the work began by concentrating on things in which the farmers expressed an interest. Early emphasis on improved farm practices shifted to emphasis on farm analysis and planning though this evolution was not anticipated.

Siegle (26) found common factors in liberal education for executives: (a) all programs were noncredit, (b) participants were few, (c) emphasis was put on humanities and values, (d) experiences differed from those of daily life, and (e) follow-up and evaluation were difficult.

Roles of the Adult Educator

Many studies bore directly or indirectly on the role of the adult educator. Montross and James (19) reported that professed motives for adult education are not necessarily real because they may reflect socially approved values. They believed the adult educator must assume the responsibility for focusing goals in educational groups. Lewis (17) concluded that motivation can be achieved by giving participants some control over

direction of program and responsibility for determining and achieving objectives. This was accompanied by some loss of control by the adult educator.

Evaluation

Action-research program-evaluation efforts were under way in several informal adult education programs. Nielson and Crosswhite (22) reported one example. Some articles and handbook types of publications on evaluation have appeared, including those of the Council of National Organizations of the AEA (1) and the Federal Extension Service. A monograph by the staff of the U. S. Public Health Service (29) offers principles and a case example of pretesting a program and a filmstrip as a teaching material. Banta (2) surveyed Colorado junior colleges to determine sources of data for program evaluation.

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CHAPTER IX

Research Within Selected Programs

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THE RESEARCH studies reported in this chapter are grouped under the following headings: public-school adult education, church adult education, library adult education, Cooperative Extension Service, university and college extension, and industry programs.

Public-School Adult Education

Olds (49) reported that of the 17,000 school districts with total enrollments of 150 or more pupils, 6000 provided adult education to 4 million or more adults. Programs ranged from remedial activities for illiterates or candidates for high-school diplomas to broad, inclusive programs meeting the needs of people who had already completed many years of formal education.

Thaden (65) explained the low participation in rural areas by pointing out that the one-teacher school is still prevalent in most states but that school district reorganization in populous states can be expected to accelerate the growth of adult education in rural areas. Holden (35) reported that total enrollment for 1946-47 in vocational and general adult education in the public schools of the continental United States was 2,682,786. For 1956-57 it was 4,373,054, an increase of 34.9 percent in vocational adult education and 91.1 percent in general adult education over the 10-year period.

The two reports of the October 1957 Current Population Survey emphasize the importance of distinguishing between enrollments and number of individuals reached. In most states, total enrollment means cumulative registrations rather than the sum of individuals. Holden (34) stated that in 1957 about 8 million adults attended classes which met three or more times. Wann and Woodward's study (67) of the census data is a thorough statistical analysis of the adult education aspects of the October 1957 Current Population Survey.

Holden's summary of the census data (34) demonstrated that participation in adult education increased as attainment increased. The converse was reported by Burman (11), whose investigation of the aspirations of adults in lower socioeconomic levels in an urban community found that few identified their educational deficiencies or were motivated to study. In investigating the study habits of business and professional men in Long Island, Bunge (10) found little motivation toward education as a means of problem solving.

In 1958, Verner and Newberry (66) examined the literature related to participation and identified the typical adult student as representative

of an urban community, tending toward young adult status, and tending also to be of lower or lower-middle economic status.

Olds (49) found that only 7.7 percent of adults were enrolled in schools supported chiefly by fees. In New York (48) a survey of the effect of a state-wide tendency to establish fees for the attendance of adults in public-school classes showed that in 40 large communities registration decreased 25 percent after a fee increase. Jackson's history of adult education in Los Angeles (36) revealed that in 1932, when tuition charges averaging \$1 a person were adopted, enrollments decreased 53.5 percent.

Holden (33) discovered that people as individuals will most readily pay for adult education which will increase their earning ability. Conversely, they are most willing to support out of tax funds the civic and public affairs type of adult education.

The October 1957 Current Population Survey of the Bureau of the Census (67) indicated that over 1 million different adults were enrolled in civic and public affairs classes during the school year 1956-57. Of this total the largest number were enrolled in group-work agencies such as YMCA and YWCA. These institutions and agencies accounted for 396,000, or 38 percent, of the enrollees. The public schools accounted for approximately 234,000 enrollees, or 22.5 percent, of the 1,043,000 adults engaged in study of civic and public affairs.

The Fund for Adult Education's emphasis on liberal education stimulated several public-school studies. Crabtree (17) listed 45 successful practices in civic education, and Snow (59) determined that a positive correlation exists between favorable economic factors in a community and program emphasis on liberal adult education. In a comparative study of the enrollments of California, Michigan, and New York, Holden (35) reported a balanced distribution between vocational and nonvocational adult education. As an inservice training device for personnel of Florida's state-supported adult education program, Hand (29) developed a procedure for community study.

Minnis (44), studying the expressed educational needs and interests of young adults in Iowa, found communication skills favored.

In 1955, Spence and Evans (62) reported a lack of research as to drop-outs in adult education. The same year the Knoxville Evening High School survey identified such factors as seasonal employment, interference of work hours, and transportation problems (46). Substantially the same findings in Florida were reported by Reynolds (51).

Church Adult Education

Garrett (24), using attitude-opinion scales in a study involving 90 Methodist ministers and over 400 lay people, found (a) that ministers have favorable attitudes toward older persons in the church, (b) that older persons stress worship as the predominant curriculum category, and (c) that older persons do not desire a special group designated to satisfy older persons' needs. An interview-questionnaire study of older persons

in the church by Gray (27), involving about 300 over 50 years of age in two Chicago churches, revealed no significant differences between younger and older church members with respect to (a) attitude toward religion, (b) participation in church activities, and (c) personal adjustment.

McCann (39), through multiple-depth interviews with 200 subjects of various backgrounds from 15 denominations, found that 82 percent had an anthropomorphic idea of God in the beginning of their religious life.

Snyder (60), investigating the response of lay leaders to group-centered leadership, found progressive acceptance and strong influence of traditional leadership concepts.

Scott (53) studied the difficulties of communicating the gospel to wage earners and classified the major barriers as (a) those that are historical; (b) those that result from the behavior of church institutions; (c) those that prevent on-the-job discussion of religious faith; (d) those that derive from institutional patterns of church services, buildings, and preaching and teaching methods.

A developmental study by Bergevin and McKinley (4), involving 2000 people in experimental programs in 35 churches over a four-year period, identified these basic educational problems: fear, overemphasis on leadership training, inadequate understanding of the adult as learner, prescribed needs, vagueness of aim, token evaluation, and preoccupation with content. To help solve these problems, the investigators developed and tested an experimental program based on these educational conditions: freedom of expression, training for all participants, active individual participation, sharing in program development, voluntary learning activities, formal and informal methods, and outward growth.

Elkin (21), tracing the development of Jewish adult religious education in the United States, found that although the concept of sustained study characteristic of traditional Judaism lost ground in the nineteenth century, the second quarter of the twentieth century showed increase of adult education activities.

Library Adult Education

Recent research in library adult education, as is to be expected in an emerging field, tended to be either a survey of existing practices (50, 55, 69) or loosely designed developmental research (56, 57, 58, 68). It is open to question whether or not this phase of adult education admits of carefully controlled research leading to safe generalizations. One major obstacle is the problem of definition: Is library adult education a body of knowledge, a point of view (1), a structure of services to adults (63), a concept that permeates the library's total program (68), or a continuous process of inservice education and adult education services to the library's community (56)? Other obstacles are the variety of sizes and types of libraries and the variety of settings in which library adult education is carried on.

The difficulties are reflected in the major research-demonstration projects of the American Library Association (described in Chapter VII of this issue). After H. L. Smith's study (55) revealed the nature and extent of current practices, the Library Community Project (68) and Phinney's study (50) of five local libraries having extensive programs both assumed the desirability of emulating such practices. Warncke (68) and Phinney (50) emphasized library self-appraisal and study of the community as a base for development of a program. R. M. Smith's tentative findings questioned these assumptions; he worked out training and implementation designs through developmental research (56, 57, 58). He stressed the need to implement library adult education as a dimension of library organization and service and a process leading toward growth in self-understanding by library personnel and intralibrary teamwork and harmony; he hypothesized that these are conditions or necessary concomitants of effective library adult education.

Cooperative Extension Service

The Cooperative Extension Service is a two-way channel between the people and the research laboratories. Extension takes the findings of biological science to the people it serves and assists in further testing and refining it; it also takes the problems of families to the social research laboratories.

Brunner and Yang (7) and DiFranco (19) inquired into the origin and growth of Extension. Other major areas of study included administrative organization and management (Chapter VII), effectiveness of personnel, programs, and procedures.

The scope and responsibilities of extension in subject-matter areas have been identified by Miller and others (43) as production, marketing, resources, management, leadership, youth, family, community, and public affairs. Earle and Evans (20) studied the programs, operational procedures, policies, and personnel of marketing in eight states, and developed recommendations for resolving problems.

Boyle (6) and DiFranco (18) analyzed the literature in adult education and identified program planning principles. Methods of program determination were studied by Matthews (41). Gwinn (28) concluded that members of county advisory committees in program projection should be representative, well informed, and familiar with available resources.

Types of organizations and related social factors were studied by Niederfrank (47). The nationwide study of 11,494 home demonstration club members in 3156 clubs was summarized by Fessenden (22). Gilbert (25) studied the development of selected aspects of home demonstration work in the United States.

The training received by county extension agents in technical agriculture, home economics, and related fields, was studied by Cook (16) and McCormick (40). McCormick asked county agents in Ohio to designate

their needs relative to nine areas of competency. The order was (a) program planning and development, (b) effective thinking, (c) communications, (d) technical knowledge, (e) human development, (f) research and education, (g) the educational process, (h) understanding social systems, and (i) Extension organization and administration. Cook's research on the training needs of county agents in Texas revealed that most agents and state staff members did not have undergraduate training in extension education or other social sciences.

Research is being conducted to determine the progress and results of Extension work. Aurbach and Kaufman (3) inquired into the knowledge and use of recommended farm practices in Alcorn County, Mississippi; 42 percent of the 139 respondents most often named the county agent as the first source of information.

The Review of Extension Research, published annually by the Federal Extension Service of the U. S. Department of Agriculture, and bibliographies of staff and graduate student research in extension provided by Columbia, Cornell, Harvard, and the University of Wisconsin are important sources.

University and College Extension

The rationale of university extension is to be found in the place of the university in a democratic society. Early developments were in liberal studies or nonvocational areas. Later developments were job-related. Grattan (26), Hart (32), Rosentreter (52), and Stockton (64) reported on Extension's history and development.

The Center for the Study of Liberal Education for Adults (13) interviewed evening school directors and selected teachers, and administered an attitude questionnaire to about 100 students in each of nine Middle Western institutions. Students wanted liberal education to be oriented toward the past and toward current needs and interests, viewed the teacher's role as a dominant one, welcomed grading, expected the teacher to "cause" them to become interested in the subject, and resented requirements but felt secure when able to meet them. Students who had held tradition-centered attitudes on aims, requirements, and teaching shifted to student-centered attitudes on the items dealing with institutional scope. Harrison (31) used interviews and questionnaires with similar subjects in 14 evening college programs. From differences in responses, he identified common features of designs for credit and for noncredit evening college programs and common uncertainties in designs. Eleven items on the questionnaire were identified as providing opposite responses by a majority of credit and of noncredit teachers. Students, teachers, and administrators tended to agree in their responses to elements of course design.

The Michigan Council of State College Presidents (42), acting in the difficult and important area of institutional interrelationships, emphasized, after study of programs in Michigan, the need for joint planning,

administration, promotion, use of staff, and approach to the clientele. In addition, they recognized and supported the primary role of local institutions and the co-operating responsibility of state institutions in communities where local institutions had incorporated adult education in the local-school plan.

By means of questionnaires and personal and telephone interviews with 800 drop-outs of eight Middle Western evening colleges, Carey (12) identified two basic interest groups: culturally oriented and vocationally minded. Most of the vocationally minded were males, were not taking courses elsewhere, gave job causes and finances as reasons for dropping, were planning to return, had interrupted or abandoned educational plans, said there was too much homework, said physical facilities were inadequate, were not attracted to study, and had awareness of not getting ahead. Love (38) using paired attendees and nonattendees of the City College School of Business extension and evening division, conducted 39 depth interviews. Analysis suggested two preconditions to the sequence of enrollment. Each person who became a student (a) had an awareness of education as a positive value in the solution of problems, and (b) had equated education with success and happiness. The sequence of enrollment was identified as follows: the individual (a) must have had a current problem for which he sought a solution; (b) must have been aware of a specific course or field of study; (c) must have directed his inquiry to one or more schools dependent on acquaintanceship with other students, prestige of the school in the community, specific courses offered, and social or class grouping which the school customarily attracted; and (d) must have enrolled.

Morton (45) carried out an extensive study of users of university extension with data from 57 member institutions of the National University Extension Association. Omitting mass-media users, one-third were professional educators and almost one-third were workers in business and industry. In general, university extension served middle-aged urban people with church affiliations, with higher-than-average educational and economic levels, of both sexes, and with the principal purpose of improving their income or their job efficiency. Eighty percent felt they had no voice in determining what services would be available to them, the form and character of services, or the conditions under which the services might be used.

Further research needs to be directed toward identifying the adult education roles of universities and colleges in relation to other state and local educational agencies, toward identifying clientele and their needs, and toward rigorous evaluation of the effectiveness of educational services rendered.

Industry Programs

Review of educational research programs in industry is difficult because of the variety of ways by which such research is reported and the fact that much of it is never reported in a generally available form. Edu-

cational programs of business and industry have grown to major proportions and cover practically every area of education, as reported by Clark and Sloan (14).

Most attention has been focused on problems in management training activities. Andrews (2) reported on the difficulties in attempting to relate formal training to subsequent job behavior. He noted that trainees favor such activities, but feel that results should be measurable; and he reviewed attempts of social scientists to provide objective criteria for measurement.

One of the most widely discussed attempts to evaluate such training was that reported by Fleishman, Harris, and Burt (23). They attempted to evaluate the results of a human relations training program by questionnaire, measuring leadership behavior and attitudes on two "opposing" factors—"consideration" and "initiating structure." They found that the trained group had less consideration than the nontrained control group; and less consideration before training than after. Hariton (30) suggested that conditions outside the formal training program affected results achieved.

These findings resulted in controversy about research methods, measuring devices, and proper approach to evaluation. Many studies have been undertaken with differing techniques in attempting to measure change. Blansfield (5) and Buchanan (8) reported positive evidence of change compatible with training goals. Collins (15) evaluated a management training program by means of the devices used by Fleishman, Harris, and Burt; he attempted a broader evaluation through use of sentence completion and interviews. He reported that the Fleishman, Harris, and Burt instruments gave approximately the same results as the original study, but that the other devices indicated changes occurred compatible with the training.

No generally accepted approach or techniques have been developed. The literature is profuse with reported attempts at evaluation utilizing differing techniques. Among recent efforts are a forced-choice rating plan, reported by Kunze (37); a "Supervisory Inventory of Human Relations," reported by Soik (61); and a plan to develop an index of change to evaluate improvement of management through a management-development program, reported by Buchanan and Brunstetter (9).

A brief report can scarcely provide a picture of the extent and range of research being conducted concerning industrial education activities. Siegle (54) described activities in liberal education for company executives and noted that with the exception of an evaluation study now being carried on by the American Telephone and Telegraph Company, there is little sound basis for judging these programs. Education in economics, practical politics, and other areas all raise further questions concerning appropriate content and methods of instruction. Though there has been a wholesome growth in research both by individuals within industrial organizations and by individuals in educational institutions concerned with such programs, merely a beginning has been made.

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CHAPTER X

Education of the Aged

EUGENE A. FRIEDMANN

THE ECONOMIC, urban, and technological development of the United States during this century has been accompanied by marked shifts in age composition of the population. Taeuber and Taeuber (33) reported that between 1900 and 1955 the older adult represented the most rapidly increasing age group in our population. However, projections for the 1955 to 1975 period reported by Taeuber (32) and the U. S. Bureau of the Census (36) indicated a tapering off of this increase. Growth rate of the age group 65 years old and older will level off; the 45-64 age group will remain unchanged in proportion; the 25-44 age group will proportionately decrease; and the under-25 age group will represent the fastest growing segment of our population.

Although aging trends as represented by the increasing proportion of adults (20 years old and older) to pre-adults in our society will be halted and actually reversed during these years, labor force projections (36) show that the increase in average age of the adult group itself will continue. The age group 45 years old and older, which increased from 30 percent of the adult population in 1900 to 43 percent in 1950, is expected to rise to 47 percent by 1975. The group 65 years old and older, which increased from 7 percent in 1900 to 12 percent in 1950, is expected to reach 15 percent by 1975.

Changes in age composition of the adult population are significant to the adult educator to the extent that content, techniques, or objectives of programing are affected, as they must be if increasing age produces change in learning ability.

Reviews, Bibliographies, and Data Summaries

Research tended to verify the proposition that the later years of adulthood are distinguishable from the earlier years in terms of the adjustments which the individual must make to his changing physical and mental capacities and to patterns of participation which society defines. Programing for the needs of this age group was explored in a discussion of education for later maturity (9).

Although knowledge about the aged has increased since Tibbitts and Donahue's summary (35), little research attempted to define the specific educational problems. An annotated bibliography was published by the U. S. Office of Education (39) in 1958. General bibliographical material and an indication of trends appeared in a 1949-55 supplement to Shock's original comprehensive bibliography of research in aging (28) and in a revision of his earlier review of trends (29). HEW's Committee on

Aging published an abbreviated annotated bibliography (37). U. S. Bureau of the Census data on the socioeconomic characteristics of the population 65 years old and older were summarized and interpreted by Sheldon (27), and by Steiner and Dorfman (30) in their report on a 1952 special census survey of the aged.

Changes in psychological functioning with age were reviewed by Lorge (19) and by Hand (13) with specific reference to their significance for teachers of adults. A broader inquiry into the conceptual framework underlying research into the psychological aspects of aging was contained in the report of the American Psychological Association's research planning conference (1). Pressey and Kuhlen (26) examined psychological development and change through the adult life span in the context of age-related changes in the social, economic, and cultural environment.

Intellectual Capacities of the Aged

Cross-sectional studies of adult intelligence using the revised *Wechsler Adult Intelligence Scale* continued to indicate decline in performance in the later years (10, 40). Lorge (18, 20) maintained that rates of change cannot be inferred from cross-sectional studies of test differences between young and old since they contrast age groups not to be equated in motivation, education, familiarity with testing procedures, or suitability of test materials.

Advantages of longitudinal studies for determination of age-related changes in intelligence are apparent, but data are not sufficient. The few longitudinal studies of this period did not indicate general decline after age 50, at least for the adult of superior educational and intellectual attainments. Owens (24), retesting in their fifties 127 men who had taken the *Army Alpha Test* as college freshmen, found their recent test averages unmistakably higher. A follow-up on Terman's gifted cases by Bayley and Oden (3) showed gains in middle life and old age on a "concept mastery" test.

Efforts to refine instruments and controls for cross-sectional testing of changes in intelligence with advancing age continued. Corsini and Fassett (6) and Berkowitz (4) reported that ability to manipulate abstract symbols outside an experimental context declines in later adulthood. But Berkowitz noted that individual differences are greater than group differences and that many specific abilities survive into the seventies and eighties. Kay (16) reported a relationship between motivation, transfer of past learning, and the older adult's ability to learn. King (17) explored the nature of the "resistance" to the learning of new techniques on the part of a group of older craftsmen.

Miner (21) tested the hypothesis that changes in intellectual ability with advancing age vary with level of educational attainment, and reported that although decline in ability with age for the group as a whole was observed, those 55 years old and older who had completed nine or more

years of schooling showed a significantly higher level of test performance than did their younger adult counterparts with equivalent schooling.

Demming and Pressey (8) reported efforts to construct tests related to the context of adult experience and posing problems meaningful to the adult. Early results indicated that older adults can obtain high scores, but use of the tests for cross-sectional surveys of changes in intellectual ability with age is limited by their bias in favor of the mature adult as interpretations of changes with age based upon current testing techniques are limited by the advantages which these instruments give to the youth and young adult.*

Determinants of Educational Participation by the Aged

Holden's report (15) of the U. S. Bureau of the Census recent sample survey of adult educational enrollments revealed a progressive decline in participation through the adult age range. The rate of participation by the 30-44 age group is over three times that of the 60-74 age group and nine times that of the 75-and-over age group.

Despite the difficulties of measuring adult learning capacities and the conflicting nature of the data, none of the studies reported such change as to exclude many old people from participating in adult education. This suggests that decrease in participation is not primarily because of declining intellectual abilities and indicates a need to examine the effect of other age-related variables. Little research has used age as a variable in the testing of the effect of socioeconomic and social-psychological determinants. The following discussion examines determinants for which age-related data are available or can be inferred.

Physical Disability

There are no published national surveys of the health status of the population 65 years old and older. With such, it would still be difficult to determine the physical deficiencies which would preclude participation. A crude approximation might be drawn from the Meriden study of health as measured by employability (5). This indicated that 4 percent of the men and 3 percent of the women in the 55-64 age group were unemployable for reasons of health and that 11 percent of the men and 25 percent of the women in the 65-74 age bracket were similarly unemployable. If we assume that employables are educable, we can derive a maximum estimate of the proportion of aged excluded from participation in adult education because of physical disability.

Income

Steiner and Dorfman (30) estimated that in 1951 about one-fifth of the aged had incomes below subsistence level, and about one-half had

* See also the section devoted to "Mental Ability" in Chapter IV of this issue.

incomes below a "modest but adequate" level. To the extent that participation costs money, it might be reasoned that one-half the population over 65 years of age would experience financial difficulty in participating.

Education

In 1950, only 26 percent of the population over 65 years of age had received more than an elementary-school education, and only 7 percent had gone beyond high school. Yet the Census survey indicated that the rate of participation for the elementary-school graduate was only one-fourth that of the high-school graduate and one-eighth that of the college graduate (15). Verner and Newberry (38) characterized adult education programs as "educating the educated." To the extent that this is true, the aged are limited in their ability to participate.

Motivation

Nicholson's survey (23) of the educational motives of adults revealed marked differences by age and sex. Most men in all age ranges reported reasons related to job security, advancement, or change. The only significant variation from this pattern was a tendency of men over 40 to state their reasons in terms of leisure, intellectual and cultural activities, and the desire for mental stimulation. Women in all age ranges stressed intellectual and cultural interests. However, among women age-related variations were observed; those in the early twenties were interested in parenthood, and those in the 36-40 age group also stressed a need for specialized vocational knowledge.

Implications for Further Research

Research relevant to education of the aging is totally inadequate beyond investigation of changing intellectual capacities. Further refinements in the measures of age-related changes in general intellectual abilities are likely to be of little use. However, additional data on motivation, learning pace, changes in specific abilities, and relationship between performance and the pertinence of the test problem to the experiential context of the older adult should have implications for the adapting of program content and techniques.

The factors limiting participation by the aged affect adults of all ages. For the male, they reflect the predominantly vocational orientation of present-day adult education. For both male and female, they reflect its tendency to exclude adults at the lower income and educational levels. To the extent that vocational training has lost its relevancy for the aged and to the extent that they are disproportionately represented in the lower income and educational categories, they are unprovided for by current adult programs.

Trends indicate continuing improvements in income and educational levels of the aged, which will diminish these barriers. However, as Neu-

garten (22), Friedmann (11), Havighurst and Orr (14), Tibbitts (34), and others have indicated, a larger gap will develop between the socially determined needs of this group and those of the younger group.

From the point of view of the employed male, increased productivity will bring more leisure time, both a shortened work week and a longer period of retirement. Studies by Corson and McConnell (7) and Streib and Thompson (31) indicated a greater willingness by older workers to retire than comparable studies of the 1940's.

For women, a period of new life after family rearing is of increasing significance. Fewer children and earlier marriages leave them free of family responsibility at an earlier age. Glick's analysis (12) of changing family cycle indicated that a woman will now live longer in the post-child-rearing phase than while her children were growing up.

There has come about a redefinition of *old age*. Early in the Industrial Revolution, work and family responsibilities tended to continue to the end of life. Old age implied physical incapacity which left a person unable to fulfill adult functions. The shortening of the family and work cycles and the extending of the life span, however, have established a late period during which the historic bases for social participation by the adult have vanished, without a lessening of his ability to participate. Parsons (25) gave a negative definition of old age in this sense, i.e., a period of separation from the major adult job and family and community activities. Yet the viewing of old age as a time of freedom from work and family obligations indicates that social roles defining a new stage in the life cycle will emerge.

The shifting social position of the aged during the last half century has made it difficult to define the basis for their participation in adult education. Beginnings are being made with programs designed to prepare the middle-aged adult for the transition to old age. The Cold Springs residential program, described by Andrus (2), is the first systematic attempt to devise a comprehensive opportunity for the aged based on research into the characteristics of the participants.

The age grading of participation which has characterized juvenile education is being extended to adulthood. The task of education is to identify the emerging roles of the aged and to relate its programing to them.

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CHAPTER XI

Education for Community Development

E. J. NIEDERFRANK and LUCY WELLBORN COLE

DURING the last 10 years, community development has become of increased interest in the United States and in other parts of the world. The Adult Education Association continued to emphasize community development in adult education both in publications and in conferences. Sheats, Jayne, and Spence (19) pointed up the role and relationship of the community to adult education. Recognition of this interrelationship goes back to 1900, as remarked by Spence and Wolff (21).

Community development has become an action field with little scientific research to date. Almost no studies in which there was either wide quantification or rigorous definition of terms were found. The literature, though mostly promotional, included some helpful materials on community development in foreign countries, but these descriptive reports and evaluations do not contribute new theory. Many programs, however, attempt to follow well-known basic principles of education through community action.

Theory

Community development yet lacks a systematic theory in terms of social science. This fact was emphasized by Sanders (18), who identified some of the background of community development, its two levels of operation for theoretical development, and several views of community development. Community development conceptually has roots both in the economists' image of developing community resources and capital and in the social workers' view of organizing the various charitable organizations to work toward common goals. In the context of adult education, community organization is thought of in terms of community councils, surveys, improvement associations, public health education, or similar programs in which citizen participation is a major aim. It is no wonder, then, that one has difficulty in describing basic community development either in general or in relation to adult education. The two are not synonymous although frequently practitioners in each field treat them as such.

Sanders pointed out that the levels of theory are (a) tested principles of operation, and (b) the social disciplines of economics, sociology, and psychology. He explained that community development may be viewed as (a) a process of growth, (b) a method for achieving objectives of group action, (c) a program for specific improvements, or (d) program plus emotional dynamics.

A recent ICA publication (24) included Sanders' treatment of community development theory as well as several short chapters on principles and methods found in community development programs in various parts

of the world. The March 1958 issue of *Rural Sociology* also contained several other articles on community development theory in addition to that by Sanders (18).

Principles

A few scientific studies stand out as making notable contributions to the understanding of basic principles and processes in community development. A most outstanding recent study dealing with involvement, by Sower and others (20), described and analyzed procedures by which a social action program was initiated and carried out. The subject of the study was a health self-survey conducted by 700 volunteer interviewers among 10,000 families in 23 communities, both rural and urban. Four phases of the action process were studied in detail: its emergence from the cultural setting, its initiation and legitimation, its execution, and its consequences. Different action patterns were observed in rural and urban areas. This book makes a valuable contribution to action process theory.

Several studies dealt more specifically with involvement. Miller's nationwide study (12) not only brought to light the significance of power structure, leadership patterns, and growth of understanding but also pointed out regional differences in these concepts and their relation to successful action. In 218 small-town American communities that acquired a hospital, a health department, or a program of health insurance, the action was studied to see the different action phases and to determine the structural avenues through which this action flowed. Miller noted that capacities for decision making are built into some positions and offices. Case studies illustrated how these decision-making capacities are organized in different communities. The study has value as an analysis of the action process and how its nature relates to goal achievement.

Hunter (8) discussed power structure, and his findings directly relate to adult education. He concluded that a group at the top of the social structure makes the decisions, and that all policy makers are "men of power" acting within a framework of socially sanctioned authority. Decisions sift down to those delegated to put them into effect. The book contributed to action process theory.

Ruopp (17) set forth various approaches to community development and the sociological principles involved, with examples from abroad. His study has sections on villages, peasantry, social change, and technical assistance. Collier and Collier (5) described a Cornell-Peru project, which showed that understanding the limitations and the potentialities of an existing social structure is necessary to accomplishment. The five-year experiment on Hacienda Vicos involved slowly creating a desire for change on the part of the peons. The operation of the hacienda under traditional rules was the core of the approach.

Community organization and development from the standpoint of social work was treated by Ross (16), whose excellent summary defining the field is followed by several chapters on case studies. Any reader interested in

the operational principles of education for community development will do well to read the fine report on community development around the world published by the United Nations (23). Based on data from governments of underdeveloped countries, it set forth the basic elements of successful programs and provided specific illustrations of work projects such as irrigation, land reforms, and resettlement carried on through rural welfare centers, societies and councils, community schools, and extension service. The role of the government and methods of training local leaders and personnel were evaluated. The book's value lies in the over-all view it presents of community development programs in underdeveloped countries, and though it does not contribute to theory, the principles described are related to well-known theory.

An excellent series of articles (22) relating to both theory and practice and based in part on research studies was oriented toward the urban community. Some of the chapters described urban renewal as a form of community development.

The studies of Alexander and others (1), Bailey and Baird (3), Bonser and Mauer (4), Hay and Mayo (7), and Kaufman (9), provided scientific evaluation of rural community development programs or projects as found in most of the Southern states. The case study of the Clinton County, Ohio, planning group by Andrews (2) summarized procedures, problems, and accomplishments over 10 years. He pointed up the importance of being aware of community needs, involving new leaders, flexibility of methods, and continued evaluation. The self-studies of the Benoit Community in Mississippi (10) and Montgomery County in Kentucky (25) also contributed, especially in the use of self-study as a technique. Harvey (6), Mayo (11), Niederfrank and Rochester (13), Rivers (14), and Rivers and Kaufman (15), produced extension-type or "how-to-do" material relating to state-wide rural programs in the South. These items included principles and methods based on research and tested experience.

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